

# **EVALUATION OF ESOH DATA SOURCES AND THEIR CONTENT**

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## **PART I - INTRODUCTION**

### **1. Background**

To make certain that vital Army mission needs are not at risk from environmental regulatory or interest group actions, senior Army leadership must anticipate developments and prepare installations to comply with emerging traditional environmental security issues as well as Emerging Nontraditional Security Issues (ENSI). These issues are identified through a variety of means to include scanning of technical and popular periodical publications, news media, Web sites, proposed and actual legislation, proposed or modified regulations, executive orders, Department of Defense (DoD) instructions/policies and treaties.

As a forward-looking agent, one of the Army Environmental Policy Institute's (AEPI) many responsibilities is to keep the leadership informed of major environmental issues that are affecting or that may affect Army operations. A newly assigned mission also directs AEPI to support the development of installations policies.

In order to carry out this responsibility, AEPI must analyze a number of Army programs' performance trends to enable their extrapolation into future potential systemic environmental issues. To accomplish this objective, AEPI must obtain real-time access to existing and future Army information systems, reports and databases containing not only indicators of environmental issues and trends that will point to systemic issues, (i.e., trends in compliance, funding, land management, conservation, training, hazardous materials management, etc.) but also information related to the Army's mission, transformation strategy, training doctrine, weapon systems, facilities and infrastructure, and budget allocation. The scope of this study, however, is limited to the evaluation of environmental information systems, reports and databases.

## **2. Study Objectives**

AEPI contracted with BAHRI Inc. to evaluate the holdings of existing environmental databases, as defined in the Statement of work (SOW) <sup>1</sup>, and to assess their ability to support and identify systemic environmental issues. As such, the objectives of this study are: (1) to assist AEPI in identifying key databases and (2) to provide a general overview of each system's capabilities by cataloguing their associated data fields and reports.

## **3. Methodology**

The study process involved interviewing DoD personnel at various levels of responsibility to ascertain the type of information being collected and their method of collection; researching (on-line whenever possible) existing automated information systems and systems in development; reviewing user manuals for each system to gain additional knowledge of available system features; and lastly compiling research information into a final report.

## **4. Report Organization**

The report is organized into four parts. Part I includes the introduction, background, study objectives and methodology. Part II provides a detailed description of existing information systems by alphabetic order, while part III presents an overview of information systems in development. Lastly, Part IV contains a glossary of terms.

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<sup>1</sup> Databases/datafields include ISR, ECAS, EPR, EQR and other AEC AND ODEP maintained systems as defined in SOW.

## **PART II - CHARACTERISTICS OF EXISTING INFORMATION SYSTEMS**

### **1. Defense Environmental Network and Information eXchange (DENIX)**

**1.1 Overview:** The Defense Environmental Network and Information eXchange (DENIX) is a World Wide Web (WWW) site that serves as a central communications platform for the exchange and dissemination of information between DoD, Federal and State Government Agencies, and the General Public.

DENIX provides capability to review environmental, safety, health and fire publications online, perform full text searching of its web site and other web sites, identify new information posted, participate in discussions covering various subjects, obtain current DoD policy, federal and state laws and regulations, locate environmental conferences, training classes and job opportunities, and connect to other Web sites and hosts containing environmental, safety, health and fire information.

Subject areas on DENIX include a state, DoD, international, and a public menu. Except for the public menu, access to all other subject areas is restricted to account holders. DENIX includes a Defense Environmental Security Corporate Information Management (DESCIM) Program Management Office (PMO) information area under the DoD menu as well as the ability to submit electronic reports such as the Environmental Program Requirements (EPR), Environmental Quality Report (EQR), Installation Status Report (ISR) Part II, Defense Site Environmental Restoration Tracking System (DSERTS) and Environmental Compliance Assessment System (ECAS) up the chain of command.

**1.2 Application:** Web-based system. The DENIX home page is located at <http://www.denix.osd.mil>. DENIX was fielded in August 1993.

**1.3 Reporting Frequency:** N/A

**1.4 System Data Fields:** As depicted in figure 1 below, DENIX features a variety of information in the following categories:

**What's New:**

- Provides recent additions to DENIX, current messages, NewInfo feature, and an interactive calendar of Events.

**User's Interaction:**

- Provides online discussion forums on various topical, DoD component-related, or specialized working group activities. There is also a real-time, interactive chat forum for additional discussion.
- Provides the ability to submit reports (EPR, EQR, ISRII, DSERTS, ECAS) electronically through the chain of command.

**Information Areas:**

- Provides industry-wide environmental, safety, health and fire news, including proprietary subscriptions, DoD service-wide publications, and homepages such as Earth Day and America Recycles Day.
- Provides course listings and other training opportunities within DoD, Federal Agencies and the Private Sector.
- Provides DESCIM program information (program status, service Points of Contact (POCs), fact sheets, newsletter) and DESCIM systems (discussion areas, deployment plans and latest software).
- Provides access to current federal and state laws, regulations and executive orders.
- Provides access to DoD and Component policy, guidance, instructions, directives and orders.
- Provides a library of topical information on: air, alternative fuel vehicles, cleanup, compliance, conservation, ergonomics, explosives, hazardous waste,

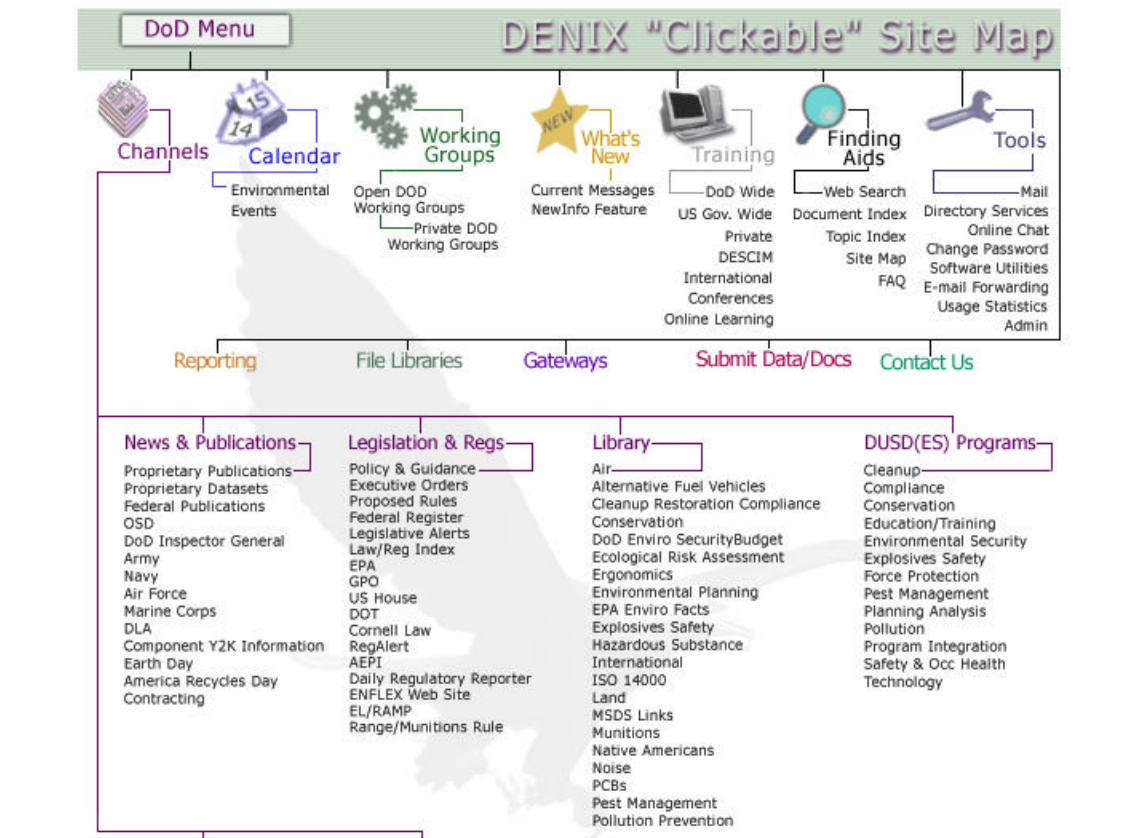


- international environmental concerns, International Organization for Standardization (ISO) 14000, land, Material Safety Data Sheet (MSDS), munitions, Native Americans, noise, PCB's, pest management, pollution prevention, regional environmental coordinators, recycling, risk management, safety and health, toxics, waste and water.
- Provides Deputy Undersecretary of Defense/Environmental Security (DUSD/ES) program information (cleanup/installation restoration, compliance, conservation, education and training, explosives safety, force protection, pest management, planning analysis, pollution prevention, program integration and technology.
  - Provides, under its “gateways” feature, web links to other military, environmental, and safety related sites.

**Tools:**

- Provides specialized area for accessing file upload/download applications, change password utility, software utilities, and online chat. In addition, there are finding aids such as the DENIX Web Search Engine, topic index, site map and FAQ's.

**Figure 1 – DENIX Main Menu Information Categories**



**1.5 System Maintenance:** Assisted by contractors, the United States Army Corps of Engineers Construction Engineering Research Laboratories (USACERL) developed and maintains DENIX.

**1.6 Contact:** DENIX training or support:  
 (703) 256-6661 or 1-800-766-1319  
 E-Mail: [osdmgr@www.denix.osd.mil](mailto:osdmgr@www.denix.osd.mil)

To obtain a login for DENIX access:  
 (217)-373-6790  
 E-Mail: [dnxmgr@www.denix.osd.mil](mailto:dnxmgr@www.denix.osd.mil)

## **2. Defense Site Environmental Restoration Tracking System (DSERTS)**

**2.1 Overview:** The purpose of the DSERTS system is to provide an automated method to manage, track and query data collected during environmental restoration activities at DoD sites and to provide roll-up capability for upward submission of data. It is specifically used to report DoD cleanup projects under the Installation Restoration Program (IRP), the formerly Used Defense Sites (FUDS) Program, and the Base Realignment and Closure (BRAC) Sites. The data are entered at the installation level and rolled-up to higher commands, DoD and congress. DSERTS provides information for the Defense Environmental Restoration Program (DERP) Annual Report to Congress (ARC) and is also used to develop and defend Program Objective Memorandas (POM). The system is related to the Restoration Cost to Complete System (RCTCS) as it supplies the sites identified as the basis for cost estimation (required dollars) of restoration projects that are inserted back into the DSERTS system for budgeting (programmed dollars). DSERTS is also a source of data for In Progress Reviews (IPRs), and for tracking Measures of Merit (MoMs) that support Defense Planning Guidance (DPG).

**2.2 Application:** Web-based system available through DENIX. DSERTS can also be accessed at the following web site:

<http://aec-www1.apgea.army.mil:6001/dserts/plsql/dserts>. DSERTS version 4.3, was fielded in February 2001. DSERTS has also been incorporated into the new Army Environmental Database (AEDB) system. See Part III of this report.

**2.3 Reporting Frequency:** Two mandatory data calls (Fall and Spring)

**2.4 System Data Fields:** DSERTS allows unlimited ad hoc queries of data. Reports are generated using various filters (Major Command (MACOM), National Priority List (NPL), Program Fund SubCode (PFSC), Major Subordinate

Commands/Districts (MSC), State, Installation) and are grouped by the following major categories:

**Figure 2 - DSERTS Report Features**

<b><u>FILTERS</u></b>					
<b>MACOM</b>	<b>NPL</b> (No, Proposed, Yes, Delisted)	<b>PFSC</b> (Compliance, Restoration)	<b>MSC</b>	<b>STATE</b>	<b>INSTALLATION</b>
<b>REPORTS</b>					
Site	Installation	BRAC	Funding	Relative Risk	Quality Assurance
Phase Summary - MACOM	Interagency Agreements	BRAC Data	Installation Army Management Structure (AMS) Code Funding Summary	Risk Factor Scored	ARC B-1 Table Summary
Phase Summary - State	Record of Decision (ROD)	BRAC Data	AMS Code Funding Details	Risk Media	Phase Status Inconsistency
Phase Summary - Installation	Documentation	Finding of Suitability to Lease (FOSL) Data	Installation Cost To Complete (CTC)	Risk Category	Installation Achieving Final Remedy In Place (RIP)/Response Complete (RC)
Site Data - Summary	Operable Units (OUs)	FOSL Summary	Installation Phase CTC	Installation Action Plan	Site Not Evaluated for Relative
Site Data - Detail	Active Transfers	Finding of Suitability for Transfer (FOST) Data	Installation Site CTC Report	Risk Data	Sites with Minimal Contaminants Hazard Factor (CHF) Driving the High Risk Status
Site Summary Chart	Installation Progress	FOST Summary	Installation CTC Detail	Risk Comparison	High Relative Risk Sites with No Funding
Site Type Analysis	Restoration Advisory Board (RAB)	Redevelopment	Installation Program Management (PM) Funding		Sites Not Evaluated for Risk but Receiving Funding
	Penalties	BRAC Cleanup Plan (BCP) Abstract	MACOM PM Funding		Sites/CTC Phase Completed
			HQ PM Funding		RIP/RC Sites with Incomplete Action
					Pending Sites

**Figure 3 – DSERT Site Type Analysis Report (Example)**

Report: <a href="#">Site Type Analysis</a>		Home
DEFENSE SITE ENVIRONMENTAL RESTORATION TRACKING SYSTEM		
SITE TYPE ANALYSIS REPORT		07/20/1998
Program Options: DEF		
Subprogram Options: Compliance, Restoration		
Installations		
ALABAMA AAF		
Site Type	Site Type Description	Number of Sites
Code		
DA	Surface Disposal Area	1
DP	Disposal Pit/Dry Well	1
LF	Landfill	1
Total:		3
Reporting Period End Date:		06/30/1998

**Site Reports Menu:**

- Phase Summary – Overall: Identifies the number of sites for each phase and their status for the entire database.
- Phase Summary – MACOM: Identifies the number of sites for each phase and their status for a MACOM.
- Phase Summary – State: Identifies the number of sites for each phase and their status for a state.
- Phase Summary – Installation: Identifies the number of sites for each phase and their status for an installation.
- Site Data – Summary: Provides a short list of all sites within a selected installation.
- Site Data – Detail: Provides site specific information for all sites within a selected installation

- Site Summary Chart: Provides necessary site data for preparers of the Installation Action Plans (IAP), which are required for all installations with Defense Environmental Restoration Account (DERA) requirements.
- Site Type Analysis: Identifies the number of valid site type for an installation.
- Remedy Summary Report: A listing of the remedy, the remedy code and remedy type and installation count of occurrences at non-RC sites with that remedy grouped by remedy status.

**Installation Reports Menu:**

- Interagency Agreements (Inter-Agency Agreements): A detailed listing of the Interagency Agreement information. This includes the signature status and dates for Component, Environmental Protection Agency (EPA), and state and local regulators. A total of all IAGs is also provided.
- Record of Decision (ROD)/Decision Document (DD): A listing of the type of document (ROD or DD), type of action (Interim or Final), status and date for Component, EPA, state and local regulators signatures, Action Level, and 5-Year Review. A total of all RODs/DDs is provided.
- Documentation: A listing of site documents reporting on sites located on a specified installation(s).
- Operable Units: A listing of the title and description of each OU within an installation.
- Active Transfers: A listing of sites that have been transferred from Army ownership to another civilian or government organization.
- Installation Progress: A report of cleanup information for a selected installation(s).

- RAB: Displays the information shown on the RAB data entry screen and Technical Assistance for Public Participation (TAPP) applications for each selected installation.
- Penalties: Displays the information shown on the Penalties data entry screen for each selected installation.

**BRAC Reports Menu:**

- BRAC Data: Displays the information shown on the BRAC Program data entry screen for each selected installation.
- BRAC Summary: Displays a chart summarizing BRAC Program information for selected installations.
- FOSL Data: Displays the information shown on the FOSL data entry screen for each selected installation.
- FOSL Summary: Displays a chart summarizing FOSL information for selected installations.
- FOST Data: Displays the information shown on the FOST data entry screen for each selected installation.
- FOST Summary: Displays a chart summarizing FOST information for selected installations.
- Redevelopment: Displays redevelopment plan information for selected installations.
- BCP Abstract: Displays the predefined BCP Abstract report for selected installations.
- BCP Abstract Narratives: Displays the information shown on the BCP Abstract data entry screen for each selected installation.

### **Funding Reports Menu:**

- Installation AMS Code Funding Summary Report: A listing of total AMS code entries.
- AMS Code Funding Details Report: A listing of all sites associated with an AMS code and the sites' current phase status.
- Installation CTC Report: A listing of the installations total CTC records for all fiscal years evaluated.
- Installation Phase CTC Report: A listing of the installations CTC records totaled by sites for all fiscal years evaluated.
- Installation Site CTC Report: A listing of the installations CTC records totaled by sites for all fiscal years evaluated.
- Installation CTC Detail Report: A listing of the installations CTC records for each site and each phase for all fiscal years evaluated.
- Installation PM Funding: A listing of the Installation level Program Management data.
- MACOM PM Funding: A listing of the MACOM level Program Management data.
- HQ PM Funding: A listing of the HQ level Program Management data.

### **Relative Risk Reports Menu:**

- Risk Factor Scored: Risk factor report for all sites at an installation(s) and for all relative risk media.
- Risk Media: Displays totals of risk media for sites in each selected installation, grouped by media, risk category of the media (high, medium, low) and NPL status (Y or N; N meaning anything which is not Y).
- Risk Category: Identifies risk categories for all sites at a specified installation(s).



- Installation Action Plan: Displays a predefined installation action plan.
- Risk Data: Lists all relative risk data for sites.
- Risk Comparison: Identifies changes to the relative risk rankings since the last data submission.

**Quality Assurance Reports Menu:**

- ARC B-1 Table Summary Report: An overall summary of site information by installation as it will appear in the Annual Report to Congress, Table B-1 section.
- Phase Status Inconsistency Report: A listing by site of all phases in which the phase status is inconsistent with the phase date as governed by the reporting period end date.
- Installation Achieving Final RIP/RC Report: A listing of the latest date that the installation achieves an installation-wide RIP/RC status.
- Sites Not Evaluated for Relative Risk Report: A listing of all sites that are not evaluated for relative risk with the exception of BRAC compliance sites, RIP sites and RC sites.
- Sites with Minimal CHF Driving the High Risk Status Report: listings by site and media of those sites that have a high risk and all the media with a high risk have a “Minimal” CHF.
- High Relative Risk Sites with No Funding Report: A listing of all in-progress (non-response complete) sites that have a high risk and no funding data (or \$0 total) in the CTC and/or obligation plan tables or all CTC data are beyond the DPG goal of Fiscal Year (FY)04.
- Sites Not Evaluated for Risk but Receiving Funding Report: A listing of all in-progress sites that are not evaluated for relative risk but have funding data in the CTC or obligation plan tables.

- **Response Complete Sites Receiving Funding Report:** A listing of all sites with an actual RC status and having non-LTM CTC funds programmed in fiscal years beyond the fiscal year in which the site attained its actual RC status.
- **Sites/CTC Phase Comp – Funding Outside of Phase Dates:** A listing by site of all phases where CTC funding is not within the DSERTS start and end dates for that phase and/or flag when the last funding year and the estimated phase end are in different fiscal years for each phase.
- **Sites/CTC Phase Comp: Sites With Underway or Future Phases Without Funding**  
– A listing, by site, of all phases where CTC funding is not within the DSERTS start and end dates for the phase and/or flag when the last funding year and the estimated phase end are in different fiscal years for each phase.
- **Sites/CTC Phase Comp: Sites That Have Funding For Phases Without Phase Info**  
– A listing by site of all phases that have been assigned CTC funding without the phases information added.
- **RIP/RC Sites with incomplete Actions:** A listing by site of all Remedial Actions that are after the RIP/RC date.
- **Pending Sites:** A listing of the Site Name, RC Date, RRSE Category, Program and Reason for Adding for all new sites.
- **Delete Sites:** A listing of the Site Name, RC Date, RRSE Category, Program and Reason for Deleting for all deleted sites.

**2.5 System Maintenance:** DSERTS/RCTC is sponsored by the DESCIM/PMO and is developed and maintained by the US Army Corps of Engineers Waterways Experiment Station (WES) Information Technology Laboratory (ITL) – Computer Science Division. Note: Air Force and Navy use their own systems.

**2.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

### **3. Environmental Compliance Assessment System (ECAS) Program Software**

**3.1 Overview:** The Environmental Compliance Assessment System (ECAS) program software is used for tracking findings and corrective actions identified during site external audits and installation internal audits conducted as part of the Army's environmental compliance auditing program, which began in 1991. ECAS assessments, provide a "snap-shot" of the installation's environmental compliance status. Both strengths and weaknesses of the installation's environmental program are identified with root cause analysis and suggestions for corrective actions.

**3.2 Application:** Web-based system available through DENIX. This system can be used both as a reporting and management tool. ECAS program version 1.8, was fielded in January 1997. ECAS has also been incorporated into the new AEDB system. See Part III of this report. For comparison, Air Force and Navy use their own systems.

**3.3 Reporting Frequency:** Each installation is assessed by an external audit team on a three-year cycle and annually by an internal audit team. Data are loaded into the ECAS system after each assessment and progress status provided on a quarterly basis.

**3.4 System Data Fields:** The ECAS tracking software is divided into three primary sections; (1) Administration, (2) Findings and (3) Reports.

**Administration:** In this section administrators can:

- Create Projects
- Designate Teams and Users Level
- Assign Users to Teams and Teams to Projects
- Add Facilities
- Update Regulatory Criteria, Summary Condition Statements and Corrective Alternatives

**Findings:** This section allows users to sort and filter a number of data fields as depicted in the following figure. Each finding is assigned a rating of Significant, Major or Minor using a pre-established environmental risk matrix based on potential environmental threat, impact on readiness, cost of compliance correction and regulatory actions. A root cause and necessary corrective actions is also provided for each finding.

**Figure 4 – ECAS Findings Summary (Example)**

WINCASS II User ID: 'Fred' Status: 'Administrator'

File Edit View Administration Window Help

Project: AL2199001

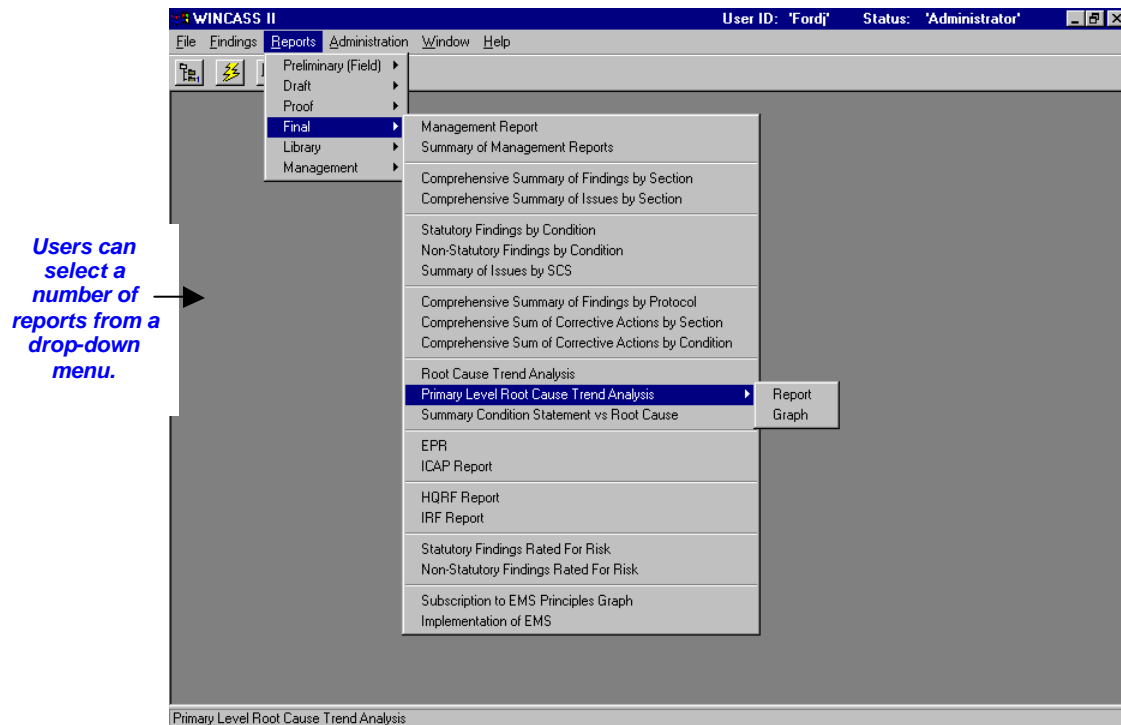
Finding No.	Uniform Regulatory Code	Issue	Root Cause	Rating	Assessment Date	Status	Facility
A001	PM 045 23 ARNG 10		R01	Min	02/06/1998	Open	432 Denver National Guard
A003	HW 225 02 TEAM 04		R03	Sig	02/06/1998	Open	Mile High Stadium Arena
A004	01 005 13 TEAM 01		C02	Sig	02/06/1998	Open	735 Colorado Springs Natl
A005	02 001 01 ARNG 01		C01	Ma	02/06/1998	Open	Mile High Stadium Arena
A006	05 001 05 ARNG 20	Mgmt			02/06/1998	Open	432 Denver National Guard
A007	NR 001 01 ARNG 01		E02	Sig	02/06/1998	Open	Mile High Stadium Arena
A008							
A009	NR 020 04 ARNG 06		C03	Sig	02/06/1998	Open	Mile High Stadium Arena
A012	ST 050 02 TEAM 14		R03	Min	02/06/1998	Open	735 Colorado Springs Natl
A014	WA 136 01 TEAM 03		C02	Sig	02/07/1998	Open	Mile High Stadium Arena
X001	AE 001 01 ARNG 01		E01	Ma	02/07/1998	Open	735 Colorado Springs Natl
X002	NR 015 02 ARNG 03		C02	Min	02/07/1998	Open	Mile High Stadium Arena
X003	HW 072 05 TEAM 04		R02	Ma	02/07/1998	Open	Mile High Stadium Arena
X004	AE 001 01 TEAM 01		R03	Ma	03/20/1998	Open	432 Denver National Guard
X005							
X006	AE 001 03 ARNG 05		R05	Ma	02/02/1998	Open	432 Denver National Guard
X007	05 001 05 ARNG 30	Mgmt			02/06/1998	Open	735 Colorado Springs Natl
X008							
X009	AE 001 01 TEAM 01		C03	Sig	02/06/1998	Open	735 Colorado Springs Natl
X010							
X011	05 001 05 ARNG 50	Mgmt			02/06/1998	Open	432 Denver National Guard

On this screen are Findings: 1 to 17 of 24

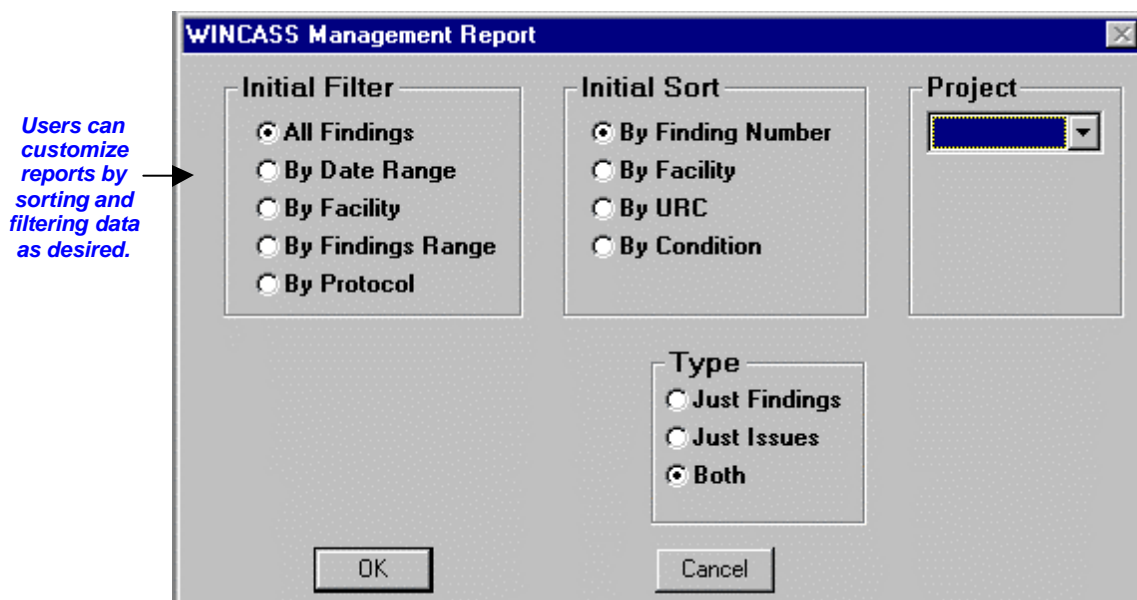
Users can sort and filter any column.

**Reports:** As depicted below, a number of reports can be created from a drop-down menu. Reports can also be customized by sorting and filtering the data as desired.

**Figure 5 – ECAS Reports List**



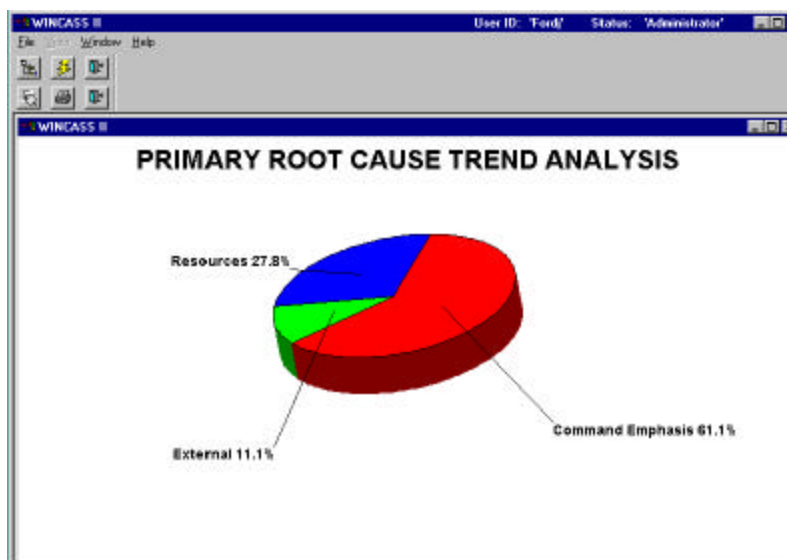
**Figure 6 – ECAS Report Filters List**



**Figure 7 – ECAS Summary Report (Example)**

Summary of Management Report				
FINAL				
WINCASS SUMMARY OF MANAGEMENT AND ISSUE REPORTS				
COLORADO ARMY NATIONAL GUARD				
03/16/1998				
FINDING	FACILITY NAME	FACILITY TYPE	SUMMARY CONDITION STATEMENT	RATING
A001	State Facility	Armory	Runoff from firefighting at a pest management facility	None
			drains to surface water.	
A001	Mile High Stadium	Arena	The installation has not prepared an hazardous waste management program.	
A004	Mile High Stadium	Arena	Agency enforcement action has not been resolved.	
A005	Mile High Stadium	Arena	Create SCS and identify previous assessment information.	
A005	Tim's House	livable	Agency enforcement action has not been resolved.	Significant
Page 1 of 16				
FINAL				

**Figure 8 – ECAS Root Cause Trend Analysis Report (Example)**



**3.5 System Maintenance:** Assisted by contractors, the United States Army Corps of Engineers Construction Engineering Research Laboratories (USACERL) developed and maintains the ECAS system.

**3.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

## **4. Environmental Law Division**

**4.1 Overview:** The Compliance Branch of the Environmental Law Division tracks funding requirements for fines and penalties and identifies causes of violations on a quarterly basis. Data are received from each MACOM on a quarterly basis and is compiled manually into various “Word” documents. Information for cases dated as far back as FY 1993 is available but not in a centralized database. Retrieval of information requires extensive review of case files and report summaries.

**4.2 Application:** Army Headquarters does not have a current automated system to track and report on its environmental fines and penalties. Reports are generated in “Word” document format.

**4.3 Reporting Frequency:** Quarterly Reporting.

**4.4 System Data Fields:** Although not consolidated into a centralized database, a quarterly report prepared by the Environmental Law Division office describes significant developments that occurred during the reporting quarter and includes summaries of enforcement trends and interpretive comments. The report is divided in four parts as follows:

### **Part 1. Update on Significant enforcement issues:**

- Provides enforcement action status
- Provides settlement status

### **Part 2. Table of Pending Cases:**

- This table, included in the report as an attachment, provides information about each of the open enforcement actions by: installation; date fine was assessed;



statute and regulatory agency involved; fine assessed; and a brief summary of the allegations made and the status of the case. Information that is new since the last report is underlined.

### **Part 3. Table of Closed Cases:**

- This table, also included in the report as an attachment, summarizes information about closed cases involving assessed fines for the current and past two fiscal years. It contains the same information fields as in the pending cases table plus a breakout of payments made in connection with settling each enforcement action. That is, the table shows how much money was paid in the following categories: fine amount paid; money spent toward Supplemental Environmental Projects (SEPs) (these provide environmental benefit to the installation and are conducted in lieu of paying fines); administrative fees paid to defray the enforcement costs of regulators; and, fines paid by contractors. Information about all closed cases beginning with FY 1993 is summarized in the tables and charts in Part 4 of the report.

### **Part 4. Analysis of Fines and Settlements:**

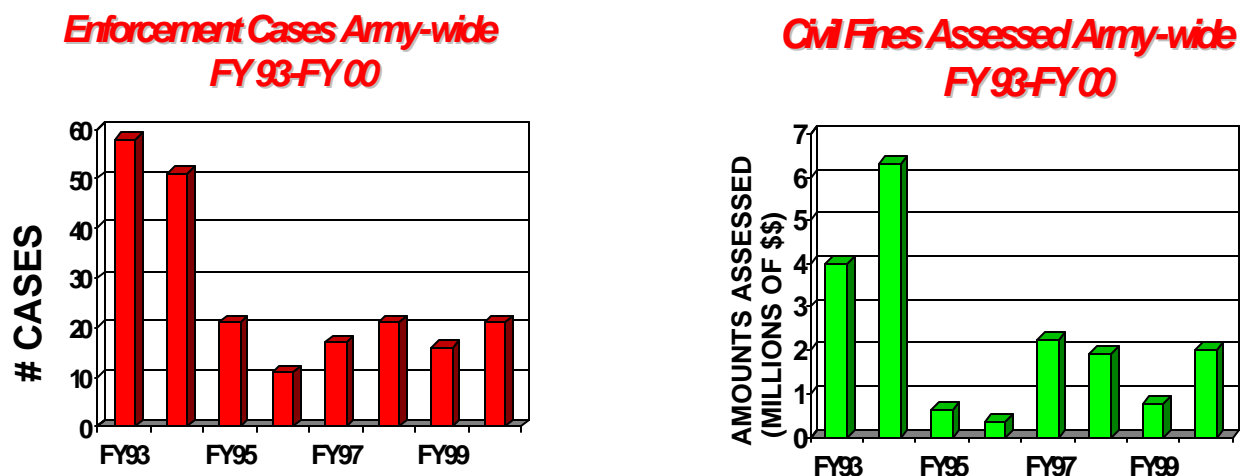
- The summary of fines assessed section of the report provides an overview of all enforcement actions from October 1993 to date where regulators have sought to impose a punitive fine against an Army installation (including National Guard Bureau and Reserve installations).
- The trends in total enforcement actions table and charts illustrate trends in the numbers and amounts of fines assessed by all regulatory agencies against Army installations. Changes in the numbers of enforcement actions from year to year provide a gross measure of overall Army installation compliance performance. While the number of enforcement actions and amounts of punitive fines assessed is related to compliance. It is also a function of changes in environmental laws (e.g., waivers of sovereign immunity that allow imposing fines), changes in the way laws are interpreted (i.e., judicial decisions and DoJ opinions prescribing

regulatory authorities), and enforcement policies of a multitude of regulatory agencies.

**Figure 9 – Army Enforcement Cases and Assessed Fines by Fiscal Year (Example)**

ARMY ENFORCEMENT CASES AND ASSESSED FINES BY FISCAL YEAR								
FY:	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00
# CASES	58	51	21	11	17	21	16	21
\$ FINES	\$3,995,041	\$6,298,432	\$636,976	\$357,354	\$2,264,549	\$1,920,475	\$751,525	\$2,005,659

**Figure 10 – Enforcement Actions Trends (Example)**



- The settlements of enforcement actions (FY 93 – to date) section of the report examine how enforcement actions involving fines have been resolved. This analysis is divided into four categories: (1) closed cases not involving an “authority-to-fine” issue, (2) closed cases involving an “authority-to-fine” issue, (3) settlements of CERCLA cases and (4) trends in settling enforcement cases.

- (1) The closed cases not involving an “authority-to-fine” issue section of the report provides information, as summarized in the three tables below, regarding closed cases where the authority of the regulatory agency was not in dispute. Thus, the settlement achieved was based on consideration of factors such as the nature and duration of violations, the installation's compliance history, and environmental harm. These tables report settlements involving state regulators, and enforcement actions brought by EPA regional offices. They are shown separately to illustrate the significant differences observed between state and EPA regulators when it comes to receiving fines and negotiating settlements.

**Figure 11 – Settlement Summaries - No Authority to Fine Issue (Example)**

<b>SETTLEMENT SUMMARY: FINES FROM STATE AGENCIES</b> (Of the 93 cases summarized below, 90 are under RCRA and 3 are under SDWA)			
<b>TOTAL ASSESSED</b> (average)	<b>FINES PAID</b> (average)	<b>SEPs FUNDED</b> (average)	<b>FINES + SEPs</b> (average)
<b>A. Installation Paid No Fines and Performed No SEPs: 29 Cases</b>			
<b>\$649,773</b> (\$22,406)	--	--	--
<b>B. Installation Paid Fines (No SEPs): 47 Cases</b>			
<b>\$1,160,217</b> (\$24,685)	<b>\$593,684</b> (\$12,632)	--	--
<b>C. Settlements that Included Performance of SEPs: 17 Cases</b>			
<b>\$3,401,595</b> (\$200,094)	<b>\$472,225</b> (\$27,778)	<b>\$4,082,096</b> (\$240,123)	<b>\$4,554,321</b> (\$267,901)
<b>A-C. TOTAL OF ABOVE SETTLEMENTS: 93 CASES</b>			
<b>\$5,211,585</b> (\$56,039)	<b>\$1,065,909</b> (\$11,461)	<b>\$4,082,096</b> (\$43,894)	<b>\$5,148,005</b> (\$55,355)
<b>SETTLEMENT SUMMARY: FINES FROM EPA REGIONAL OFFICES</b> (Of the 26 cases summarized below, 24 are under RCRA, 1 is under SDWA, 1 is under CAA)			
<b>TOTAL ASSESSED</b> (average)	<b>FINES PAID</b> (average)	<b>SEPs FUNDED</b> (average)	<b>FINES + SEPs</b> (average)
<b>A. Installation Paid No Fines and Performed No SEPs: 1 Case</b>			
<b>\$263,450</b> (N/A)	--	--	--
<b>B. Installation Paid Fines (No SEPs): 12 Cases</b>			
<b>\$1,566,174</b> (\$130,515)	<b>\$607,194</b> (\$50,600)	--	--
<b>C. Settlements that Included Performance of SEPs: 13 Cases</b>			
<b>\$6,398,196</b> (\$492,169)	<b>\$815,564</b> (\$62,736)	<b>\$8,295,641</b> (\$638,126)	<b>\$9,111,205</b> (\$700,862)
<b>A-C. TOTAL OF ABOVE SETTLEMENTS: 26 CASES</b>			
<b>\$8,227,820</b> (\$316,455)	<b>\$1,422,758</b> (\$54,721)	<b>\$8,295,641</b> (\$319,063)	<b>\$9,718,399</b> (\$373,785)
<b>SETTLEMENT SUMMARY: ALL FINES FROM STATES AND EPA</b> (Includes all 119 cases summarized in the two tables below)			
<b>TOTAL ASSESSED</b> (average)	<b>FINES PAID</b> (average)	<b>SEPs FUNDED</b> (average)	<b>FINES + SEPs</b> (average)
<b>\$13,439,405</b> (\$112,936)	<b>\$2,488,667</b> (\$20,913)	<b>\$12,377,737</b> (\$104,015)	<b>\$14,866,404</b> (\$124,928)

- (2) The closed cases involving an “authority-to-fine” issue section of the report provides a summary of cases the Army has contested the regulatory agencies’ authority to impose punitive fines. In several cases, particularly those from several years ago, some fines were either simply paid or paid “under protest” (expressly reserving the right to contest payment in other cases) pending resolution of the issue.

**Figure 12 – Settlement Summaries - With Authority to Fine Issue (Example)**

<b>STATUTE</b>	<b># CASES</b>	<b>FINES ASSESSED</b>
CAA	53	\$1,004,488
CWA	24	\$186,169
SDWA (pre-1996 waiver)	5	\$52,150
RCRA-UST	5	\$7,300
<b>TOTAL</b>	<b>87</b>	<b>\$1,250,107</b>

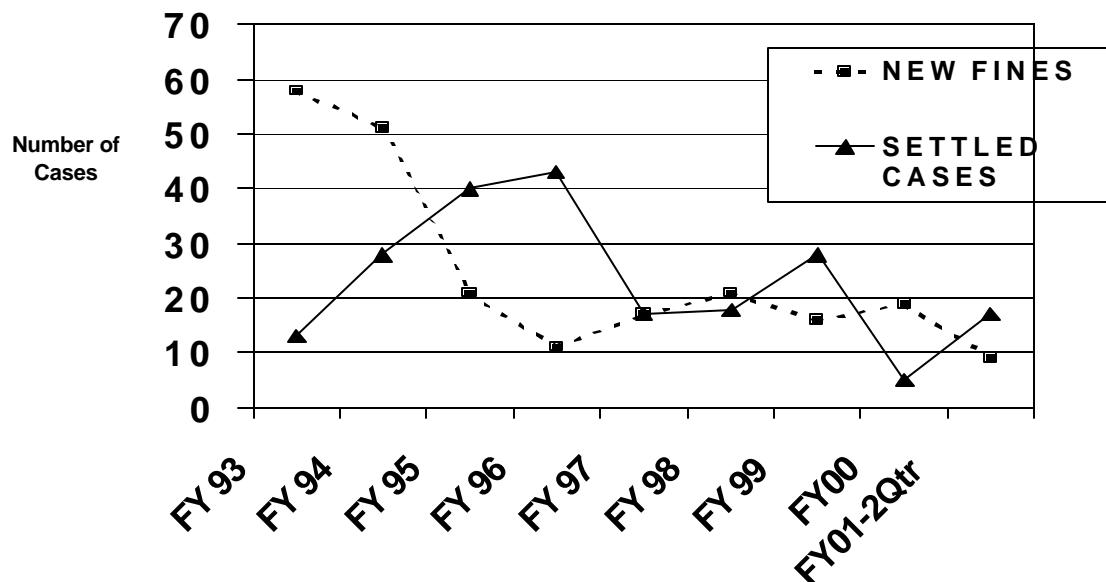
- (3) The settlements of CERCLA cases section of the report provide information regarding violations linked to restoration activities. This has been a rare occurrence and summary is normally provided in a brief descriptive paragraph as opposed to being depicted in table or graph formats.
- (4) The trends in settling enforcement cases section of the report presents a table and a chart that provide an overall view of annual assessments and settlements of all enforcement cases that have included fines.

**Figure 13 – Settlements of Army Enforcement Cases by Fiscal Year (Example)**

SETTLEMENTS OF ARMY ENFORCEMENT CASES BY FISCAL YEAR						
FY	CASES SETTLED	TOTAL FINES ASSESSED	FINES PAID BY FACILITY	SEPs	ADMIN FEES	FINES PAID BY CONTRACTOR
1993	13	\$45,264	\$27,334	0	0	0
1994	28	\$647,512	\$219,280	\$63,218	\$9,069	\$28,500
1995	40	\$5,005,386	\$1,037,201	\$1,568,231	\$7,000	\$55,500
1996	43	\$3,088,066	\$392,180	\$2,586,695	\$711	\$7,500
1997	17	\$4,501,927	\$602,845	\$4,459,420	0	\$10,820
1998	18	\$326,311	\$44,910	\$38,160	\$11,050	\$4,085
1999	28	\$2,105,573	\$409,149	\$3,558,427	0	\$118,833
2000	5	\$117,000	0	0	5,000	0
2001	17	\$992,473	\$406,117	134,586	0	\$56,898
<b>TOTAL</b>	<b>209</b>	<b>\$16,829,512</b>	<b>\$3,139,016</b>	<b>\$12,408,737</b>	<b>\$32,830</b>	<b>\$282,136</b>
<b>TOTAL ARMY LIABILITY: FINES PAID + SEPs + FEES = \$15,580,583</b>						

### Trends in New Fines and Settled Cases

FY93 -2<sup>nd</sup> Quarter FY01



**4.5 System Maintenance:** N/A. No automated system currently used.

**4.6 Contact:** Compliance Branch, Environmental Law Division  
(703)-696-1593

## **5. Environmental Legislative/Regulatory Analysis and Monitoring Program (EL/RAMP)**

**5.1 Overview:** The Environmental Legislative/Regulatory Analysis and Monitoring Program (EL/RAMP) is designed as an early warning mechanism to inform the Army leadership of new environmental requirements at their conception. As an environmental issue emerges or a new piece of legislation or regulatory action develops, the EL/RAMP team produces requirement summaries, information papers, impact analyses, and comments to regulators and testimony for Congress. This allows the Army to get involved at critical stages of the law making and regulation writing process. The EL/RAMP mission is to minimize the impact of Federal and State environmental requirements on Army readiness, operations, activities, and financial resources and to better plan for their compliance. EL/RAMP activities include monitoring, prioritizing, analyzing, and commenting on emerging, proposed, and final environmental requirements. Environmental requirements can include: new legislation, proposed or modified regulations, executive orders, DoD instructions/policies and treaties.

The EL/RAMP process is accomplished through a coordinated team framework consisting of several key organizations within the Department of the Army. These organizations include: Office of the Deputy Assistant Secretary of the Army, Environmental, Safety and Occupational Health (ODASA/ESOH), Office of the Director of Environmental Programs (ODEP), Army Environmental Policy Institute (AEPI), Army Environmental Center (AEC), Army Regional Environmental Offices (REOs) and the Judge Advocate General (TJAG). The EL/RAMP team obtains additional support when needed from the Army's Office of Congressional Legislative Liaison (OCLL), the Army Office of General Counsel (OGC), and affected Army Staff (ARSTAF) elements.

The EL/RAMP process is executed in several phases as follows:



**Figure 14 – EL/RAMP Process**

Phase	Title	Action Office
Phase 1	Environmental Scanning of New and Emerging Issues	AEPI (With support from all team members)
Phase 2	Case File Development	AEPI (With support from all team members)
Phase 3	Preliminary External Requirements Identification	AEPI (With support from OCLL, TJAG)
Phase 4	Preliminary Impacts and Stakeholder Identification	AEPI
Phase 5	Preliminary Impacts Assessment of Federal Legislation	ODEP (With support from Army Environmental Network, AEC)
Phase 6	Impacts Assessment Validation	ODEP (With support from Army Environmental Network, AEC)
Phase 7	Detailed Functional Impacts Analysis	AEC (With support from ODEP, TJAG)
Phase 8	Proactive Response to Staffers, Congress, State and committees	AEC (With support from ODEP, ESOH-OCLL, TJAG)
Phase 9	Informal Participation with regulators, OSD, OMB, DOS	AEC (With support from ODEP, AEPI, ESOH)
Phase 10	Formal Participation	AEC (With support from ODEP, AEPI, ESOH)
Phase 11	Pre-promulgation of Army Regulations, Policy Memos, Implementing Guidance, etc.	AEC (With support from ODEP, AEPI, ESOH, Army Environmental Network)
Phase 12	Army Implementation	AEC (With support from ODEP)

**5.2 Application:** AEPI creates and maintains a core “home” page in different subject areas, which is available to subscribers, on the web. Other EL/RAMP functional agencies may either submit electronic versions of their analyses and supporting products to AEPI for posting to the EL/RAMP knowledgebase system, or may identify the links required to access the document on their servers. As an issue develops, all available information and analyses are added to the knowledgebase system, providing a single, comprehensive source of information to support subsequent impact assessment, response

preparation, and other decision-making activities. EL/RAMP was established in 1996 and a revised concept was developed/implemented in 1997-1998.

Registered users can access EL/RAMP products at the following Web site:

- AEPI: <http://elramp.aepi.army.mil/>

Other useful web sites which include addresses of contributing organizations are as follows:

- ODEP Information Paper Office: <http://memphis.lmi.org/ext/rk/infopaperentry.nsf>
- OCLL: <http://www.hqda.army.mil/ocll/>
- TJAG: <http://www.jagcnet.army.mil/>
- DASA (ESOH): <http://www.asaie.army.pentagon.mil/eso.htm>
- AEC: <http://www.aec.army.mil/>
- DENIX: <http://www.denix.osd.mil/denix/DOD/Legislation/EL-RAMP/el-ramp.html>

**5.3 Reporting Frequency:** As deemed necessary by the EL/RAMP team.

#### **5.4 System Data Fields:**

- AEPI Weekly Legislative Update
- National Defense Center for Environmental Excellence (NDCEE) Weekly Summary of Federal Register Announcements
- Congressional Testimony Documentation
- Daily Congressional Affairs (CA) Notes
- Legislative Hearing Summaries
- Information Papers

- Semi-Annual Regulatory Screening Process (SARS) and Final List of Regulatory Actions (FLORA)
- Monthly Environmental Law Division Bulletin

**5.5 System Maintenance:** ODEP, AEPI

**5.6 Contacts:** Army Environmental Policy Institute – EL/RAMP Support Office  
Clark Atlanta University  
223 James P. Brawley Dr., S.W., Box 115  
Atlanta, GA 30314  
(404) 880-6713

ODEP - Information Paper Office  
(703)-693-0543

## **6. Environmental Program Requirements-Module (EPR-M)**

**6.1 Overview:** The Environmental Program Requirements-Module (EPR-M) serves two purposes. First, it is designed to assist installations with collecting and reporting data relative to planning, budgeting, and forecasting environmental project costs and to maintain compliance with applicable laws and regulations. Second, it collects the data necessary to comply with DoD environmental budget reporting requirements to Congress as defined in Executive Order (EO) 12088, Title 10 U.S.C. 2706(b), the Office of Management and Budget (OMB) Circular A-11 as well as supporting the requirements for annual submission of an environmental plan as per the EPA FEDPLAN guidance.

EPR-M is used to show past accomplishments and expenditures, to track project execution and monitor performance, and to refine requirements for the budget years. It also supports the creation of the POM and the allocation of resources consistent with congressional, DoD, and Army program priorities in addition to providing critical input to the AESAP and ISRII. Installations submit their requirements to their MACOMs for approval and consolidation. In early December each year, MACOMs submit their consolidated EPR-M packages to AEC for final review, analysis and consolidation into the Environmental Program Requirements-Review (EPR-R).

**6.2 Application:** EPR-M version 2.4, fielded in July 1999, is a Microsoft Windows®-based software application. EPR-M has also been incorporated into the new AEDB system. See Part III of this report.

**6.3 Reporting Frequency:** One Mandatory Data Call (Fall); One Optional Data Call (Spring)

**6.4 System Data Fields:** EPR-M data fields fall into one of the following three categories: (1) Installation Information, (2) Project Information and (3) Funding Information. The following table depicts required entries of the EPR-M system, which are subsequently reviewed and tracked by AEC using the EPR-R system.

**Figure 15 – EPR-M System Data Fields**

Installation Information	Project Information	Funding Information
State	Project Number	Fund Code
Agency Bureau Code	Project Name	Fiscal Year
Installation Name	Law/Regulatory Area	Required Amount
Federal Facility Identification (FFID) Number	Environmental Category (ECAT)	Programmed/Budgeted Amount
Property Number	Project Assessment	Obligated
Abbreviation	Compliance Status	AMS Code
Prefix Code	Pillar	
MACOM	Class	
Subcommand	Program Area	
Support Installation	Project Type	
Installation Type	Other Project ID Type	
Ownership Type	Other Project ID	
Local Information	Total Cost Estimate	
ISR Installation Number	Must Fund	
Facility Address	Command (MACOM) Priority	
EPA Region	Local Priority	
Congressional District	Geographic Initiative	
Date Entered	Reason For Initiation	
Date Edited	Reason For Initiation	
	Pollution Prevention (P2) Category	
	P2 Cost And Benefit Data	

Installation Information	Project Information	Funding Information
	Reason For Discontinuance	
	Date Completed/Discontinued	
	Compliance Required	
	Design/Plan Completion	
	Construction/Work Start	
	Construction/Work Complete	
	Year Funding Required	
	Multiple Installations	
	P2 Used For Compliance	
	Project Contact Name	
	Contact Telephone Number	
	Project Narrative	
	Comments	
	Date Entered	
	Date Changed	

**6.5 System Maintenance:** DESCIM sponsors the EPR-M and R systems. AEC supports the Director of Environmental Programs (DEP) by implementing EPR guidance tools, such as an illustrative catalog of projects, specific guidance, by pillar, for programming and budgeting and cost estimating tools.

**6.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

AEC Environmental Data Management Support Center – Provides technical support on the EPRM.  
(410) 436-1244 or DSN 584-1244.

AMC EPR Points of Contact – AMC Installations and Services  
Activity (I&SA): Overall POC: (309) 782-8268  
AMC software support and backup POC: (309)782-8308

## **7. Environmental Program Requirements-Review (EPR-R)**

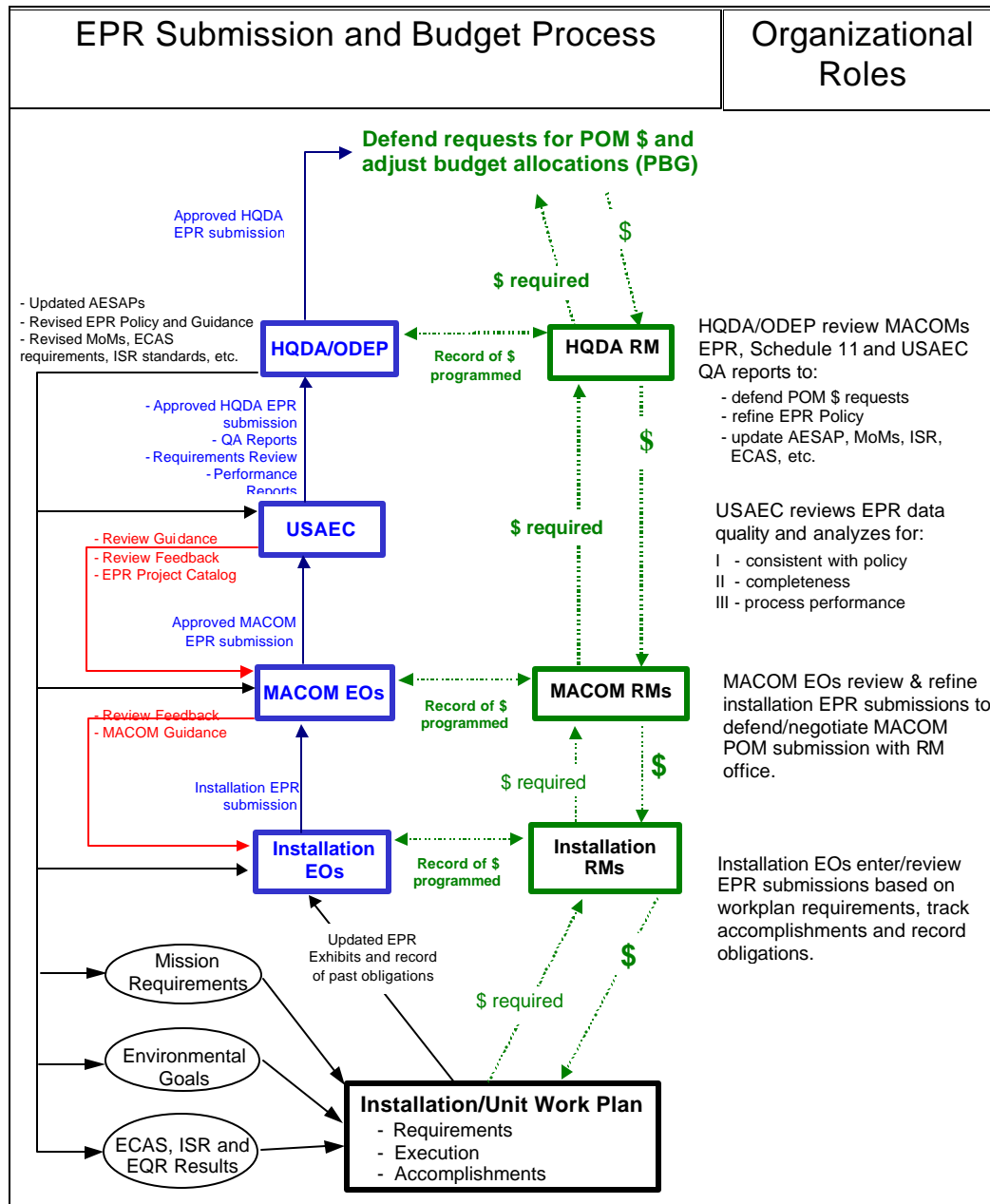
**7.1 Overview:** The Environmental Program Requirements-Review (EPR-R) is a program utilized to review projects reported in the EPR-M. AEC reviews EPR-M submittals to determine if the projects are acceptable or require further review after applying pre-determined criteria (e.g. environmental projects over \$300K). Utilizing the EPR-R, AEC reviewers have the ability to view all aspects of a project as reported in EPR-M (narrative, environmental category, law/regulation) as well as comments from the previous review cycle to ensure data integrity.

**7.2 Application:** Web-based system. EPR-R version 2.4, was fielded in May 2000. EPR-R has also been incorporated into the new AEDB system. See Part III of this report.

**7.3 Reporting Frequency:** Reviews accomplished by AEC following EPR-M data calls (Fall, Spring). This is not a reporting system.



**Figure 16 – EPR Submission and Budget Process Flow Chart**



Notes: AESAPs = Army Environmental Strategic Action Plans; ECAS = Environmental Compliance Assessment System; EOs = Environmental Offices ; EPR = Environmental Program Requirements; EQR = Environmental Quality Report; HQDA = Headquarters, Department of the Army; ISR = Installation Status Report; MACOM = Major Command; MoMs = Measures of Merit; ODEP = Office of the Director of Environmental Programs; PBG = Program and Budget Guidance ; POM = Program Objective Memorandum; PPBES = Programming, Planning, Budgeting, and Execution System; QA = Quality Assurance; RM = Resource Management; USAEC = United States Army Environmental Center.

**7.4 System Data Fields:** The EPR-R allows data filtering based on entries provided into the EPR-M. Reviews can be completed by media (air, water, etc.) and by the Army's environmental program pillar areas of major activity: Compliance, Conservation, and Pollution Prevention to include a supporting element called Foundation. It should be noted that all restoration program site-level data are reported using the DSERTS/RCTC) reporting System.

**Foundation:** The foundation element seeks to ascertain if the necessary management and leadership to oversee activities and to address issues in all four environmental program pillar areas is in place. It includes elements such as an adequately trained and staffed organization with an organizational structure tailored for: executing the Army environmental program in a timely and cost-effective manner; ensuring proper integration throughout all mission areas; and promoting environmental stewardship.

**Compliance:** The compliance pillar focuses on ensuring that Army installations and facilities achieve and maintain compliance with all Federal, State, and local laws and regulations; Presidential executive orders; and applicable country-specific Final Governing Standards and/or host nation environmental laws and international agreements overseas, except where specifically managed under other pillars areas. The Compliance Pillar also addresses control measures under major permit programs.

**Conservation:** The Conservation pillar focuses on compliance laws, regulations, and executive orders affecting natural and cultural resources; and on responsible management of these resources to ensure that they are used wisely and are protected while maintaining mission needs. It includes the pest management program. A major emphasis is to manage these resources in a manner that assures the long-term availability of our lands for the Army's mission.

**Pollution Prevention:** The Pollution Prevention (P2) pillar focuses on using prevention-based solutions as the preferred method to achieve and maintain compliance

with environmental regulations. Pollution prevention is accomplished by cost-effective approaches to source elimination or reduction, recycling, or waste minimization. It includes compliance with the Emergency Planning and Community Right-to-Know Act (EPCRA); and specific requirements of Executive Orders 13148 and 13101. Pollution prevention encompasses all those activities, which reduce the quantity of hazardous, toxic, or industrial pollutants at the source by changing the production, industrial, non-hazardous commercial and household waste, or other waste generating processes.

**Restoration:** The Restoration pillar focuses on compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by Superfund Amendments and Reauthorization Act of 1986 (SARA). Actions taken to identify contaminated sites, assess risk, and clean up contamination from previous Army activities at Active and BRAC installations are managed under this pillar.

Note: Beginning with the Fall 97, installations and MACOMs are no longer entering restoration requirements funded by the Environmental Restoration, Army (ER,A) or the Base Closure Account (BCA) directly into the EPR database. Required ER,A and BCA data collected through the MACOMs' DSERTS/RCTC Report are transferred into the EPR database as installation totals for both ER,A and BCA requirements.

**7.5 System Maintenance:** DESCIM) sponsors the EPR-M and R systems. AEC supports the DEP by implementing EPR guidance tools, such as an illustrative catalog of projects, specific guidance, by pillar, for programming and budgeting and cost estimating tools.

**7.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

## 8. Environmental Quality Report (EQR)

**8.1 Overview:** The Environmental Quality Report (EQR) is an environmental information management system used for collecting and tracking essential environmental program information and performance metrics (e.g., MoMs, enforcement actions, permits, etc.) for Service Headquarters, MACOMs, and installations. MoMs comply with federal government instructions to define environmental security goals, measure progress toward achieving those goals and assess program effectiveness. EQR is designed to be the bridge between existing MoMs data collection methods and DESCIM's target method, which will be included in the Environmental Security Corporate Reporting Suite (ESCRS) data collection processes.

**8.2 Application:** Web-based system available through DENIX. EQR version 2.5, was fielded June 2000. EQR has also been incorporated into the new AEDB system. See Part III of this report.

**8.3 Reporting Frequency:** Mandatory Data Calls: Compliance (Quarterly); Conservation and Pollution Prevention (Annually).

**8.4 System Data Fields:** EQR tracks environmental information for compliance, pollution prevention, and conservation. Systems data fields include the following:

**Figure 17 – EQR System Data Fields**

<b>Compliance</b>	<b>Pollution Prevention</b>	<b>Conservation</b>
Installation and staffing	Hazardous waste disposal	Installations requiring Integrated Natural Resource Management Plans and those with up-to-date plans
Inspections (NOVs, Fee, etc)	Non-hazardous solid waste disposal	Installation requiring Integrated Cultural Resource Management Plans and those with up-to-date plans
Enforcement Actions	Non-hazardous solid waste recycling	Installation with completed and partial planning level surveys and biological resources inventories
Permits (CAA, CWA, etc.)	Alternative Fueled Vehicles (AFV)	Installation with completed and partial wetlands inventories
Underground Storage Tanks (USTs)	Toxic Release Inventory (TRI)	Installation with Historic building inventories
Fines		Installation with archeological inventories

**8.5 System Maintenance:** DESCIM sponsors the EQR systems.

**8.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

## **9. HAZARDOUS SUBSTANCE MANAGEMENT SYSTEM (HSMS)**

**9.1 Overview:** The Hazardous Substance Management System (HSMS) is the DoD standard automated tool used for tracking hazardous substances and chemical constituents of those materials. HSMS allows Army installations to monitor the procurement, use, release, reuse, and disposal of all hazardous substances. The system also helps installations streamline environmental reporting, reduce hazardous material inventories, prevent pollution, and integrate smart business practices into hazardous materials management. HSMS is currently being implemented throughout DoD and will eventually be expanded to include additional modules for tracking and managing other environmental issues. The system tracks hazardous materials from the time of request/issue until it leaves an installation either through use, turn-in or as hazardous waste.

The HSMS is the hardware and software component of the Hazardous Material Management Program (HMMP). The system provides full functionality and legal reporting requirements to satisfy EO 12856, “Federal Compliance with Emergency Planning and Community Right-to-Know Laws and Prevention Requirements.” In addition, HSMS maintains considerable data within its database that is useful to installations in meeting additional reporting requirements mandated by Federal, State, or local regulatory agencies including Tier I, Tier II and Form R reports. HSMS tracks hazardous substance usage and hazardous waste generated through the use of a set of process algorithms, which calculate chemical release based on the way the material, is utilized (process). The system tracks hazardous substance that is requisitioned/ordered, received, stored, issued, used, recycled or spilled.

**9.2 Application:** Oracle based system. HSMS version 2.3 is currently being fielded.

**9.3 Reporting Frequency:** N/A

**9.4 System Data Fields:** HSMS provides an automated, integrated approach to hazardous material management, hazardous waste management, and pollution prevention. HSMS application software is comprised of six modules that record, track, and report on every stage of a hazardous material's existence as it moves through its life-cycle from procurement to disposal or recovery. HSMS maintains the following information regarding hazardous substances:

- Local MSDS information
- Material chemical constituent information
- Chemical hazard information
- Authorized Use List (AUL) for hazardous substances
- Information about all processes that use hazardous substances or generate hazardous waste
- Hazardous substance and chemical inventory

**9.5 System Maintenance:** ACSIM serves as the functional proponent for HSMS with support from the HQDA Deputy Chief of Staff for Logistics.

**9.6 Contact:** HSMS customer assistance office for technical support.

(888) 800-7242, [hsms@saic.com](mailto:hsms@saic.com)

## 10. Integrated Pest Management Information System (IPMIS)

**10.1 Overview:** The Integrated Pest Management Information System (IPMIS) is a personal computer program used by installation pest managers and applicators to track information pertaining to the application of pesticides. IPMIS stores pesticide applicator and installation pesticide application program information to ensure proper certification and compliance with federal, state and local laws. The software has the ability to report status of applicator certifications, application rates and inventories, and maintain historical records of application events.

**10.2 Application:** Window-based system.

**10.3 Reporting Frequency:** Annual Reporting

**10.4 System Data Fields:** IPMIS tracks the following information.

Figure 18 – IPMIS Data Fields

Integrated Pest Management Information System						
Installation information						
Pest management plans						
Pest management daily operations information:	Task	Pesticide used	Quantity used	Personnel	Location	Historical information
Inventory information						
Safety information						
Personnel and certification information						
Contract and contractor information						



**Figure 19 – Example of IPMIS Data Tracking**

The screenshot shows the 'Pesticide Inventory' window for 'LANGLEY AIR FORCE BASE' dated '08/15/2000'. Fields include EPA Registration Number (100-437-2B), Trade Name (PRINCEP 80W), Pesticide Type (INSECTICIDE), and MSDS available in Shop (checked). A table displays inventory data with columns: Received Qty, Total Purchase Cost, On-Hand Qty, Units, Cost Per Unit, Can Net Weight (lbs), and Use-By Date. The table has two rows of data, with the 'On-Hand Qty' column highlighted in blue. Below the table, it shows 'Total Quantity: 300.00000000 LB' and buttons for Save, New, Delete, Cancel, Active Ingredients, and Help.

Received Qty	Total Purchase Cost	On-Hand Qty	Units	Cost Per Unit	Can Net Weight (lbs)	Use-By Date
200.00	545.00	200.00	LB	2.72	0.00000000	12/31/2000
100.00	215.00	100.00	LB	2.15	0.00000000	12/31/2000

**IPMIS Reports:** A number of reports can be generated with the IPMIS system as listed below. The graphs function, currently not available in the IPMIS version 2.2, is being developed.

- Pest Management Plan Report
- Pest Management Maintenance Record
- Pest Management Task Report By Date
- Pest Management Task Management By Site
- Applicator Pest Management Task Report
- Certification Information Report
- Pesticide Use Break Down Report
- Pounds Of Active Ingredient Usage Report
- Pounds Of Active Ingredient Monthly Trend Report
- Pesticide Inventory Update Report

**Pest Management Plan Report (Form 1):** The Pest Management Plan Report gives the user an overview of when their last On-Site review was and who performed it. This is a multi-page report; page one lists data for the current management plans where as the following page(s) list data for the previous management plan(s). The Pest Management Plan report is divided into three sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists data about the installation's Pest Management Plan, i.e., effective date, type of review and approving consultant.
- Section three lists data on the Last On-Site Review Date and Time.

**Pest Management Maintenance Record (DD FORM1352-1) (FORM 4):** The Pest Management Maintenance Report, also called the 1532-1, is used to report pesticide usage by application, i.e., building/area, target pest and pesticide used. The Pest Management Maintenance Record report is divided into two sections:

- Section one lists data about the building/area where an application has occurred.
- Section two lists data about the pesticide applied, i.e., name and EPA Regulation number, concentration and finished product, labor time and applicator.

**Pest Management Task By Date Report (Form5):** The Pest Management Maintenance Report is used to list pesticide applications by date. The Pest Management Task report By Date is sorted by date and divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists data similar to the Pest Management Maintenance Report and includes Target Pest, Units Treated, Finished Product Pesticide Quantity, PAI and COST.

**Pest Management Task By Site Report (Form6):**

The Pest Management

Task By Site Report is used to list pesticide applications by site. The Pest Management Task By Site Report is sorted by SITE and divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists data similar to the Pest Management Maintenance Report and includes Target Pest, Units Treated, Finished Product Pesticide Quantity, PAI and COST.

**Applicator Pest Management Task Report (Form7):**

The Applicator Pest

Management Task Report is used to list pesticide applications by applicator and task number. The Applicator Pest Management Task is divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists data similar to the Pest Management Maintenance Report and includes the applicator responsible for the application, Tracking Record Number, Target Pest, Units Treated, Finished Product Pesticide Quantity, PAI and COST.

**Certification Information report (FORM3):**

The Certification Information

Report is used to identify Applicators, Approving Consultants and Government Quality Assurance Evaluators and is divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists information about the applicator, i.e., Name and address information, type of certification, and pest management duty start and end date(s).

**Pounds of Active Ingredient (PAI) Report(s):**

The Pounds of Active

Ingredients Reports are pre-formatted reports that allow the user to identify pesticides by type of area and pest treated, amount of PAI per pesticide being used and associated cost and perform analysis on trends and set goals to reduce pesticide use. PAI reports include:

- Pesticide Use Breakdown Report (FORM 2)
- Pounds of Active Ingredient Usage Report (FORM 8)
- Pounds of Active Ingredient Monthly Trend Report (FORM 9)

**Pesticide Use Break Down Report (Form 2):** The Pesticide Use Breakdown Report is used to list pesticide application by Pest and Area Application. When generating this report, users are prompted to provide an explanation of trends and a goal to reduce pesticides. The Pesticide Breakdown Report is divided into six sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists the total Pounds of Active Ingredient, PAI.
- Section three lists the pesticides used by category, i.e., Algaecides, Avicides, Fungicides, etc.
- Section four lists the application area by category, i.e., Aquatic Sites, Dumpsters, Office/Administrative areas, etc.
- Section five lists explanations for trends. Explanations are added to a report by selecting the "Explanation of Trends" tab from the report menu and typing the appropriate text.
- Section six lists the installation goals to reduce pesticides.

**Pounds Of Active Ingredient Usage Report (Form 8):** The Pounds Of Active Ingredient Usage Report is used to list the total PAI and cost of pesticides used during a specified period of time. The Pounds of Active Ingredient Usage Report is divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists pesticides individually by trade name, EPA Regulation number and cost and PAI.

**Pounds of Active Ingredient Monthly Trend Report (Form 9):** The Pounds of Active Ingredient Monthly Trend Report is used to list the total aggregate PAI and cost of pesticides used during a specified period of time. The Pounds Of Active Ingredient Monthly Trend Report is divided into two sections:

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists pesticides individually by trade name, EPR Regulation number and cost and PAI.

**Pesticide Inventory Update Report (Form 10):** The Pesticide Inventory Update Report is used to compare the IPMIS database inventory with actual on-the-shelf inventory.

- Section one lists data about the installation that the report applies to, i.e. Major Command, Installation Name and Address.
- Section two lists pesticides individually by trade name, i.e., EPR Regulation number, and IPMIS on-hand quantity.

**Figure 20 – Example of IPMIS Generated Report**

<b>Pesticide Use Report</b>			
Report Date:	08/15/0000		
Component:	USAF		
Major Command:	AFMC		
Sub Command:			
Installation:	SCOTT AIR FORCE BASE		
Federal Facility Identification Number:	IL571724177		
<hr/>			
Pesticide Usage for:	01/01/999 - 12/31/999		
Pounds Active Ingredient (PAI)			
Total:	2,015,737,736.02		
<b><u>Pesticide Breakdown</u></b>			
Algaecides:	0.00000000	Miscides:	0.00000000
Avicides:	0.00000000	Nematicides:	0.00000000
Fungicides:	435.50792969	Repellents:	0.07406250
Herbicides:	762.11885638	Rodenticides:	0.00023163
Insect Growth Regulators:	0.16000000	Others:	0.00000000
Insecticides:	817.87660673		
<b><u>Application Area Breakdown</u></b>			
Aquatic Sites:	2.65000000	Landfills And Refuse Dumps:	0.00000000
Artificial Containers (Tires, Jars, Cans, Etc.):	0.10893750	Lawns/Park Grounds:	190.09290781
		Magazines And Bookshelves:	0.00000000

**10.5 System Maintenance:** DESCIM sponsors the EQR systems.

**10.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

DESCIM Help Desk  
1-800-766-1319, (703) 354-0144

## **11. Installation Status Report (ISR)**

**11.1 Overview:** The Installation Status Report (ISR) provides a corporate view of installation level performance against Army-wide standards for infrastructure (ISR Part I), environmental programs (ISR Part II), and base support services (ISR Part III). It seeks to provide a common understanding of the status of Army installation's abilities to support readiness and to meet future assigned missions.

The ISR is an automated decision support system designed to improve visibility and management of limited resources for installations. The system is composed of Army-wide standards, installation evaluations, data collection, reporting, and analysis processes. The ISR software program and access to a common ISR database contain the assessments based on the Army-wide standards for installation-level base operations performance and conditions. Information is entered into the database at the installation level, and exported and viewed at multiple levels using additional ISR software. The ISR software produces automated and formatted reports in hard copy and electronically for installation level analysis and forwarding to higher echelons. Army staff develops the standard while ACSIM coordinates a thorough review of the standards on an annual basis.

A key benefit of ISR is that it affords the collection and centralization of the Army's standards for installation readiness within one single program. Each installation evaluates itself against a same set of standards and reports those results. The Army-wide standards are grouped into two categories, Quality and Quantity, for each of the three ISR parts.

The Chief of Staff, Army (CSA), directed the implementation of ISR Part II (Environment) on 2 October 1995. As part of the readiness review for the CSA, the ACSIM reports ISR Part II results. The goal of Part II is to capture macro-level status of

installation's environmental program and improve the justification/prioritization of limited resources. Project objectives are to assess installation environmental compliance, summarize environmental conditions, measure mission impacts, and assess the effectiveness of environmental program performance. Analysis of ISR data assist commanders at all levels to improve installation conditions and ultimately the readiness of forces.

The Headquarters Installation Status Report (HQISR) is the Executive Information System software package used as an interface to all three "Parts" of the ISR. HQISR allows a consistent means of looking at and aggregating data across levels, groupings, and types for a single installation, or group of installations within any MSC, MACOM, or Army-wide. HQISR presents the Infrastructure, Environment, and Services individual C-Ratings for each subordinate installation and command. This electronic tool can be used to view the reported ISR C-Ratings of a single installation, or those of all the reporting installations in a MSC, MACOM, or Army-wide. The HQISR system also provides executive level information by summarizing detailed ISR C-Ratings for the Army and MACOM leadership.

**11.2 Application:** Web-based system available through DENIX. ISR Part II version 5.1 was fielded in January 2001. HQISR Part II version 5.3, was fielded in February 2001. ISR Part II has also been incorporated into the new AEDB system. See Part III of this report.

**11.3 Reporting Frequency:** One Mandatory Data Call (Winter)

**11.4 System Data Fields:** The ISR Part II status information is reported by the Army's four environmental program pillars (Compliance, Conservation, Pollution Prevention, Restoration) and a Foundation element. Each of these is additionally



subdivided into environmental media. Note: See EPR-R for additional information on each environmental program pillars.

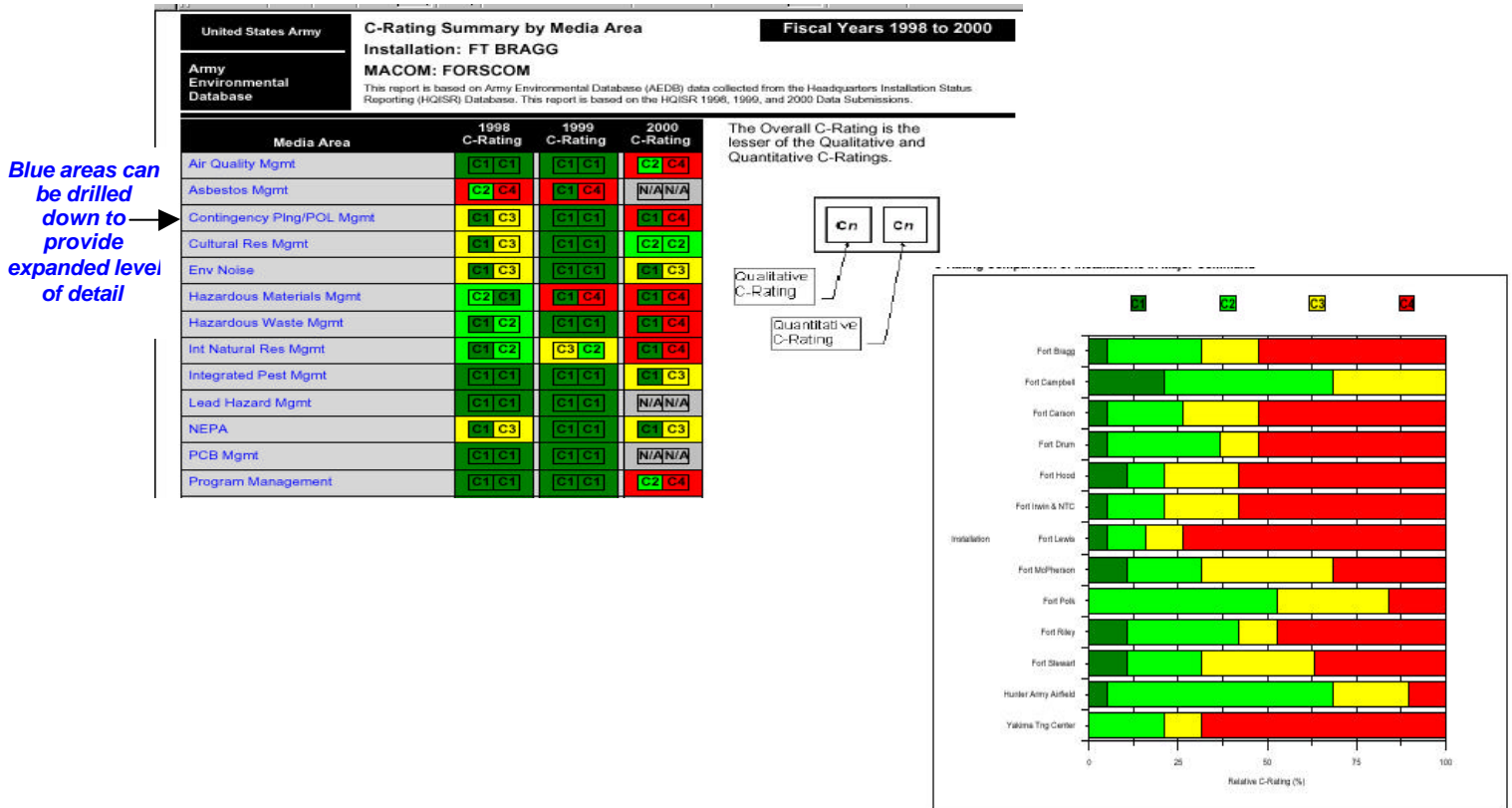
Installations environmental office import project level data from the EPR report into the ISR software. Funding requirements are also completed and information from other existing databases such as DSERTS are used to answer questions and/or rate environmental programs.

When measuring installation performance and conditions against ISR standards, ISR evaluators assign a color rating (Green, Amber, or Red) for each Quality and Quantity standard in each ISR part. Based on the data and color ratings entered, the ISR software automatically calculates Quality and Quantity Category Ratings (C-Ratings) for each part and various subdivisions of the part. Once the installation results are exported and these results are integrated into the central database, the C-Ratings and cost information are available for analysis at all command levels.

**Figure 21 - ISR Ratings**

<b>Color Ratings</b>	Green	A condition meets or exceeds the standard.
	Amber	A condition is slightly less than the standard.
	Red	A condition is well below the standard.
<b>C-Ratings</b>	C-1	Rated component meets standards or is capable of supporting all installation requirements.
	C-2	Rated component meets most of the standards or is capable of supporting most of the installation requirements with only minor functional deficiencies.
	C-3	Rated component meets some of the standards; as a result the installation is limited in its flexibility to accomplish some installation requirements, which may increase vulnerability for mission accomplishment.
	C-4	Rated component does NOT meet standards or is NOT capable of supporting installation requirements without significant additional resources.
	C-5	Installation undergoing major reorganization such as Base Closure.

**Figure 22 – C-Rating Summary by Media Area Report (Example)**



### 11.5 System Maintenance:

ACSIM sponsors the ISR Part II systems.

### 11.6 Contact:

The Support Team may be reached at:

Commercial (703) 377-0552

facsimile (703) 902-3660

Email ([helpline\\_isr@bah.com](mailto:helpline_isr@bah.com))

Web Site: <http://isr.xservices.com/>

## **12. Restoration Cost to Complete System (RCTCS)**

**12.1 Overview:** The purpose of the Restoration Cost to Complete System (RCTCS) is to provide consistent, repeatable, and justifiable budget estimates for environmental restoration projects at all Army installations and BRAC sites. The system is related to DSERTS as it uses the site identified as the basis for estimation of restoration projects. The estimates are composed of site action items chosen from a master cost item list and restoration phases. Once the estimates have been created, the cost is spread over one or more fiscal years.

**12.2 Application:** Web-based system. RCTCS version 2.4, was fielded in February 2001. A web-based DSERTS/RCTCS combined system is under development and scheduled for release in the winter of 2002. RCTCS has also been incorporated into the new AEDB system. See Part III of this report.

**12.3 Reporting Frequency:** One mandatory data call (Summer); One optional data call (Winter).

**12.4 System Data Fields:** See DSERTS description.

**12.5 System Maintenance:** DSERTS/RCTC is sponsored by the DESCIM/PMO and is developed and maintained by the US Army Corps of Engineers Waterways Experiment Station (WES) Information Technology Laboratory (ITL) – Computer Science Division.

**12.6 Contact:** DESCIM Program Manager's Office  
(703) 325-0002

### **13. Solid Waste Annual Reporting system (SWAR)**

**13.1 Overview:** SWAR is used to track information pertaining to the generation, collection, disposal, and recycling of solid waste. There are two SWAR modules; (1) SWAR-Base and, (2) SWAR-HQ. SWAR-Base is used by installation solid waste managers to track and report solid waste information. Solid waste data collected throughout a fiscal year can then be uploaded/exported to the major command to fulfill the reporting requirement and to track compliance with DoD waste reduction and recycling goals. SWAR-HQ is used by Command and HQ managers to ensure compliance with DoD MOMs and policies. SWAR-HQ incorporates summary data from the SWAR-Base system. It resides at the Service Component reporting level, and provides data in various formats, including text, graphics, and a trend analysis by installation or command.

SWARBase is the DECSIM (DoD-wide) version of the Navy's solid waste reporting system that has been in use since 1992. SWAR was originally developed as a Navy system to assist installation in complying with the Resource Conservation and Recovery Act (RCRA). The older system was DOS-based, while SWARBase was designed as a graphical (Windows) environment. The newest version of SWAR, version 1.2, includes features to remind users of special steps required when recycling range metals, HQ to HQ rollups, revised service-specific recycling categories and types, metric and currency conversions, and program-calculated actual and potential costs and cost avoidance. The target SWAR system is planned for a late-2001 release. This target system will have service-requested enhancements, including affirmative procurement tracking and easy to use ad-hoc reporting.

**13.2 Application:** Windows-based application. SWARBase has a homepage on DENIX which contains help files, updated information on use and software patch

files, current service contact information, Engineering Change Proposal (ECP) forms for submitting requests for changes, fixes, and enhancements, and current copies available for download.

**13.3 Reporting Frequency:** Annual Reporting.

**13.4 System Data Fields:**

**SWAR records the following:**

- Recycling program management information
- Installation-owned landfill information
- Landfill users' information
- Landfill capital expenditures
- Tenant information
- Comments section for success stories and any relevant clarifications

**SWAR internally calculates the following:**

- Actual Disposal Costs
- Estimated Potential Disposal Cost (PDC) based on diverted tonnage and existing disposal tipping costs
- Cost Avoidance (cost avoided by recycling)

**SWAR also provides the following:**

- A currency and metric conversion tool for overseas installations
- Screens for tracking installation-owned landfills
- A recycling "picklist" including range metals, bulky items, and used motor oil

**SWAR Reports:** SWAR offers two types of report (1) individual report and (2) summary report as follows:

- The Individual Report contains information on one specific installation in seven sections:
1. Basic Installation Information
  2. Solid Waste Recycling
  3. Solid Waste Collection/Transportation
  4. Disposal of Installation Solid Wastes
  5. Installation Landfill Operations
  6. Other installations Disposal Operation Costs and
  7. Comments / Related Information.

**Figure 23 - Solid Waste Individual Report (Example)**

**Individual Report**

1 of 5+ Total:1 100% 1 of 7955

**FY 1996 SOLID WASTE ANNUAL REPORT**  
**1 October 1995 through 30 September 1996**

SECTION 1. BASIC INSTALLATION INFORMATION

1.1 INSTALLATION ID AK177060462  
INSTALLATION NAME NAF ADAK AK  
MAILING ADDRESS CO  
NAVAL AIR FACILITY, PSC 486-55  
ADAK, AK  
ADAK, AK 96506-1202

ORGANIZATION ID PACFLT  
EFD EFA NORTHWEST  
SOLID WASTE (SW) POC CHRISTY BOHL

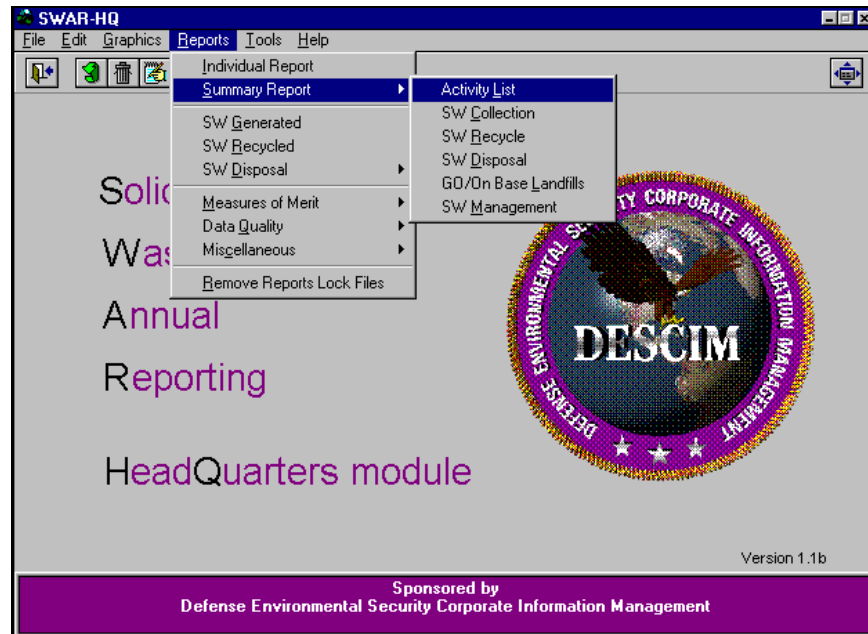
POC TITLE ENVIRONMENTAL PROTECTION SPEC  
POC CODE 050

TELEPHONE NO: DSN COM (907) 592-8666  
FAX NO: DSN 59 COM (907) 592-4709

The Summary Reports are collections of data for all installations or specific groups of installations. Options for summary reports include: Activity List, Solid Waste Collection, Solid Waste Recycling, Disposal of Solid Waste, Government Owned Base Landfills,

Solid Waste Management, Solid Waste Generated, Solid Waste Recycled, Solid Waste Disposal, MOMs, Data Quality and a Miscellaneous report.

**Figure 24 – Summary Report List**



**Activity List:** The Activity List is a listing of each Installation with the following information: Installation Name, Installation ID, Mailing Address, Organization ID, EFD, SW POC, POC Title/Code, Telephone, DSN Phone, FAX Numbers.

**Solid Waste Collection:** SW Collection is a listing of each Installation with the following information: Installation Name, Installation ID, Solid Waste Collected by, Annual Collection Costs, Total SW Generated, Total Cost per Ton.

**Solid Waste Recycling:** Solid Waste Recycling is a listing for each installation: Installation Name, Installation ID, Recycling Program, QRP, QRP Administers, Community Recycling Program, Measures for Source Reduction, Projects from Proceeds,



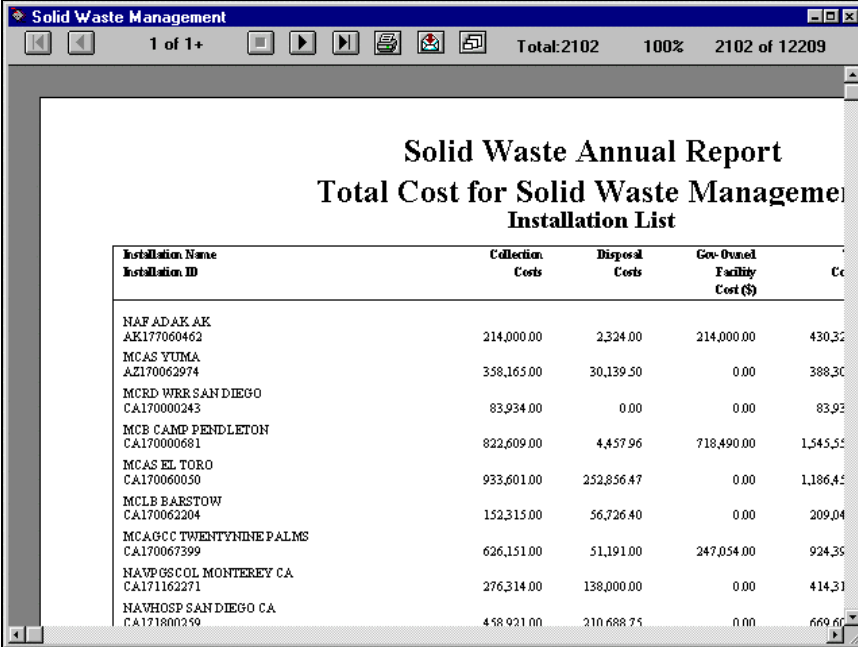
Recycled Goods Purchased, Items, Process, SW Type, Tons/Year, Annual Revenues, Info Source, Totals.

**Disposal of Solid Waste:** For each installation, Disposal of Solid Waste includes: A listing of Disposal Site Name, Owner, Type, Operator, Miles to Site, Remaining Life, Capacity, Ash Residue, Fee/Ton, Tons Disposed, Info Source. Summaries for each Installation include the Costs and Quantity for each of these facility types: Private/Municipal Landfills, Private/Municipal Incinerator, Private/Municipal Composting Sites, Private/Municipal Construction Debris, Private/Municipal Medical Waste, Federal Landfills, Federal Incinerator, Federal Composting Sites, Federal Construction Debris, Federal Medical Waste and the Totals for all. The grand total Summary adds percentages for cost and quantity.

**Government Owned Base Landfills:** Provides this information for each Installation: Installation Name, Installation ID, Site Name, Design Capacity, Remaining Capacity, Surface Area, Site Depth, Remaining Life, Depth to Ground Water, Leaching Control, Gas Control, Vector Control, and the number of Monitoring Wells. Totals are listed for Design Capacity, Remaining Capacity and Surface Area.

**Solid Waste Management:** Solid Waste Management provides totals for Collection Costs, Disposal Costs, Federal Disposal Costs, Total Costs, Total SW Generated, Total Costs per Ton. Depending on the option selected for 'Summary by' this report displays the information for each Installation (if Complete was selected), for each EFD (if EFD was selected), for Organization ID (if Organization ID was selected) or Installation Type (if Installation Type was selected). Grand Totals are given for each column.

**Figure 25 – Solid Waste Management Report (Example)**



Installation Name Installation ID	Collection Costs	Disposal Costs	Gov-Owned Facility Cost (\$)	
NAFADAK AK AKI77060462	214,000.00	2,324.00	214,000.00	430,324.00
MCAS YUMA AZI70062974	358,165.00	30,139.50	0.00	388,304.50
MCRD WRR SAN DIEGO CAI70000243	83,934.00	0.00	0.00	83,934.00
MCE CAMP PENDLETON CAI70000681	822,609.00	4,457.96	718,490.00	1,545,556.96
MCAS EL TORO CAI70060050	933,601.00	252,856.47	0.00	1,186,457.47
MCLB BARSTOW CAI70062204	152,315.00	56,726.40	0.00	209,041.40
MCAGCC TWENTYNINE PALMS CAI70067399	626,151.00	51,191.00	247,054.00	924,396.00
NAVPGS COL MONTEREY CA CAI71162271	276,314.00	138,000.00	0.00	414,314.00
NAVHOSP SAN DIEGO CA CAI71800259	458,921.00	210,688.75	0.00	669,609.75

**SW Generated:** Only one report is included in this category. Data are sorted from the most solid waste generated to the least solid waste generated.

**SW Recycled:** Only one report is included in this category. Data can be sorted in four different orders.

- Best Percentage
- Worst Percentage
- Best Tonnage
- Worst Tonnage

**Figure 26 – Solid Waste Recycled Report (Example)**

Top Recycling Installations

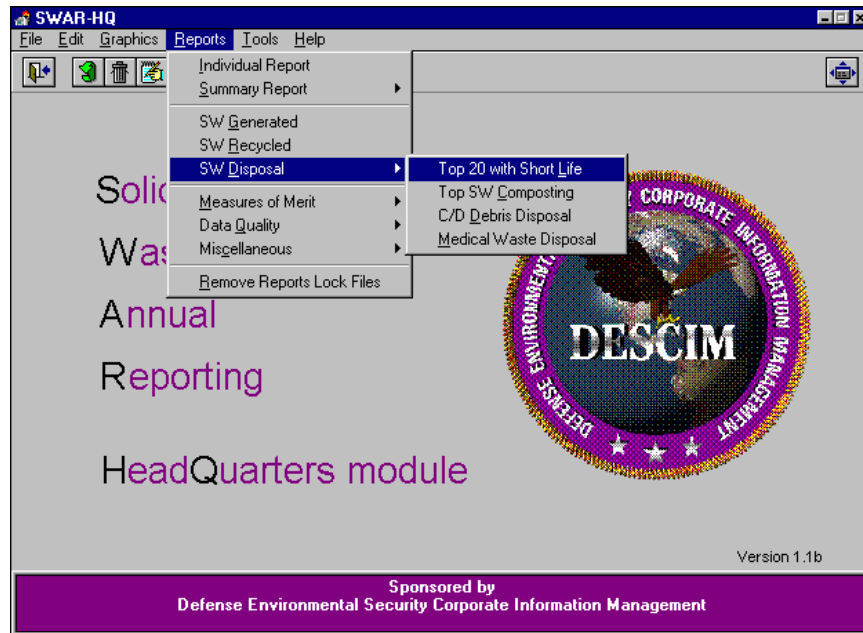
1 of 1+ Total: 142 100% 142 of 978

Installation Name Installation ID	EFD	Organization ID
NSY PORTSMOUTH NH NH172400102	EFA NORTH	NAVSEA
MCLB BARSTOW CA170062204	SOUTHWESTDIV	CMC
NAS OCEANA VA VA176060191	LANTDIV	LANTFLT
NSWCC CRANE IN IN172400164	SOUTHDIV	NAVSEA
NWIRP CALVERTON NY NY171996095	EFA NORTH	NAVAIR
NAS LEMOORE CA CA177063042	EFA WEST	PACFLT
NSY MARE ISLAND VALLEJO CA CA172400221	EFA WEST	NAVSEA
MCLB ALBANY		

**SW Disposal:** Four reports are included in this category.

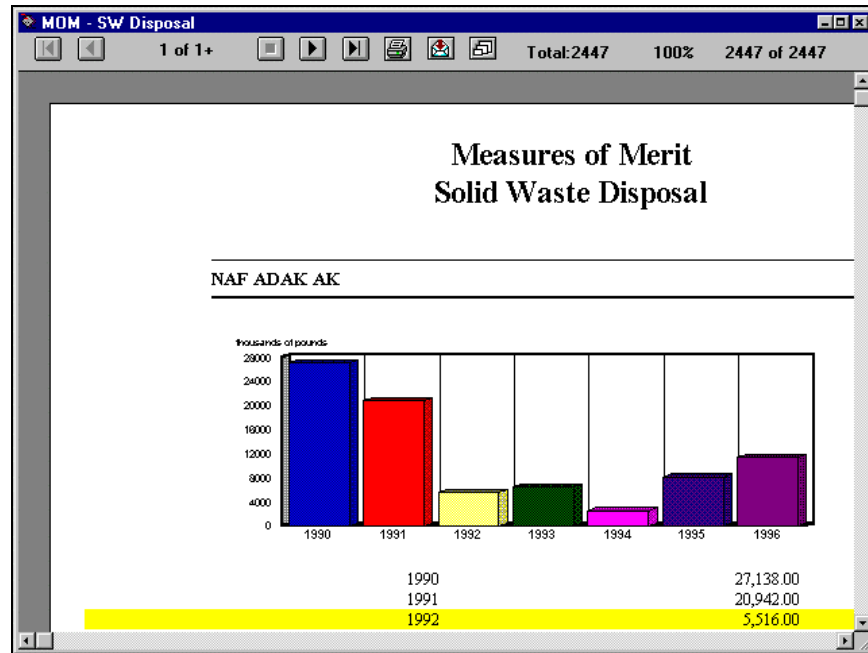
- Top 20 with Short Life: For each installation this report shows: Installation Name, Installation ID, Total SW Generated, Remaining Life, Recycling Quantity, Percentage Recycled and SWMP.
- Top Solid Waste Composting: Information listed for each installation includes: Installation Name, Installation ID, Generated, Composted, Percent Composted, Diverted, Percent Diverted, Best Composting Tonnage, Best Diverted Percentage, Best Diverted Tonnage, Worst Composting Percentage, Worst Composting Tonnage, Worst Diverted Percentage, Worst Diverted Tonnage.
- Construction / Debris Disposal: For each installation, this report lists: Installation Name, Installation ID, Total SW Generated, Construction / Debris Generated, Percentage of Total that was Construction/Debris.
- Medical Waste Disposal: For each installation this report lists: Installation Name, Installation ID, Total SW Generated, Construction Debris Generated, Percentage of Total that was Medical Waste.

**Figure 27 – Solid Waste Disposal Reports List**



**Measures Of Merit:** Two MoM reports are included in SWAR-HQ. One is for Disposal the other is for Recycling. Each of these types provides a graphic view of each individual installation as well as a view of all the installations together.

**Figure 28 – MoM Solid Waste Disposal Report (Example)**



**Data Quality:** This series of reports looks at the database to spot data that are too large, too small or simply not there.

**Miscellaneous:** Under the miscellaneous submenu are reports that help track solid waste POCs or which installations have and have not reported for a given Fiscal Year.

***13.5 System Maintenance:*** SWAR is sponsored by DESCIM

***13.6 Contact:*** Project Leader  
(703) 325-4377

For questions specifically on the SWAR-HQ software (installation, use, etc.) contact the EDMS (a contractor) support center: (410) 679-0508

For general questions on SWAR-HQ contact:

DESCIM Program Office

200 Stovall Street, Room 12S55

Alexandria, VA 22332-2300

Phone: (703) 325-2192

Fax: (703) 325-6777

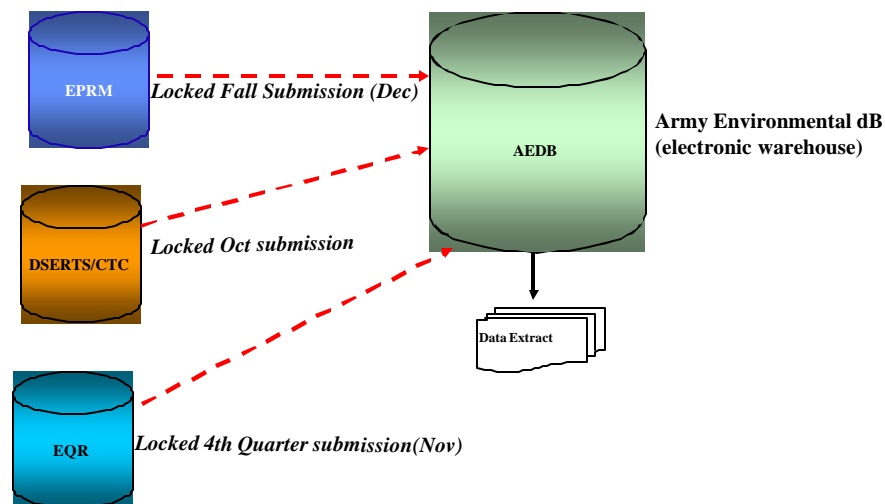
## PART III - CHARACTERISTICS OF SYSTEMS IN DEVELOPMENT

### 14. Army Environmental Database (AEDB)

**14.1 Overview:** The Army Environmental Database (AEDB) is an integrated ORACLE database aimed at improving the effectiveness and efficiency of the USAEC environmental program managers. It is a collection of analysis and reporting tools that provide access to a central repository of Army environmental information collected via Army and DESCIM environmental systems, to include EPR, EQR, DSERTS, RCTCS, ISR Part II; and ECAS.

The Program Manager's Toolkit (PMT), is a web-based system of applications and software tools designed to assist in the analysis of data from the AEDB.

**Figure 29 – AEDB System Feeders**



**14.2 Application:** Web-based application. Authorized users of the AEDB can access the system via an AEC portal at:

<http://aec-www1.apgea.army.mil:7000/aedb/plsql/aecportal.home>. The AEDB version 1.0, was fielded in September 2000 at the MACOM level.



**Figure 30 - AEDB System Data Flow**

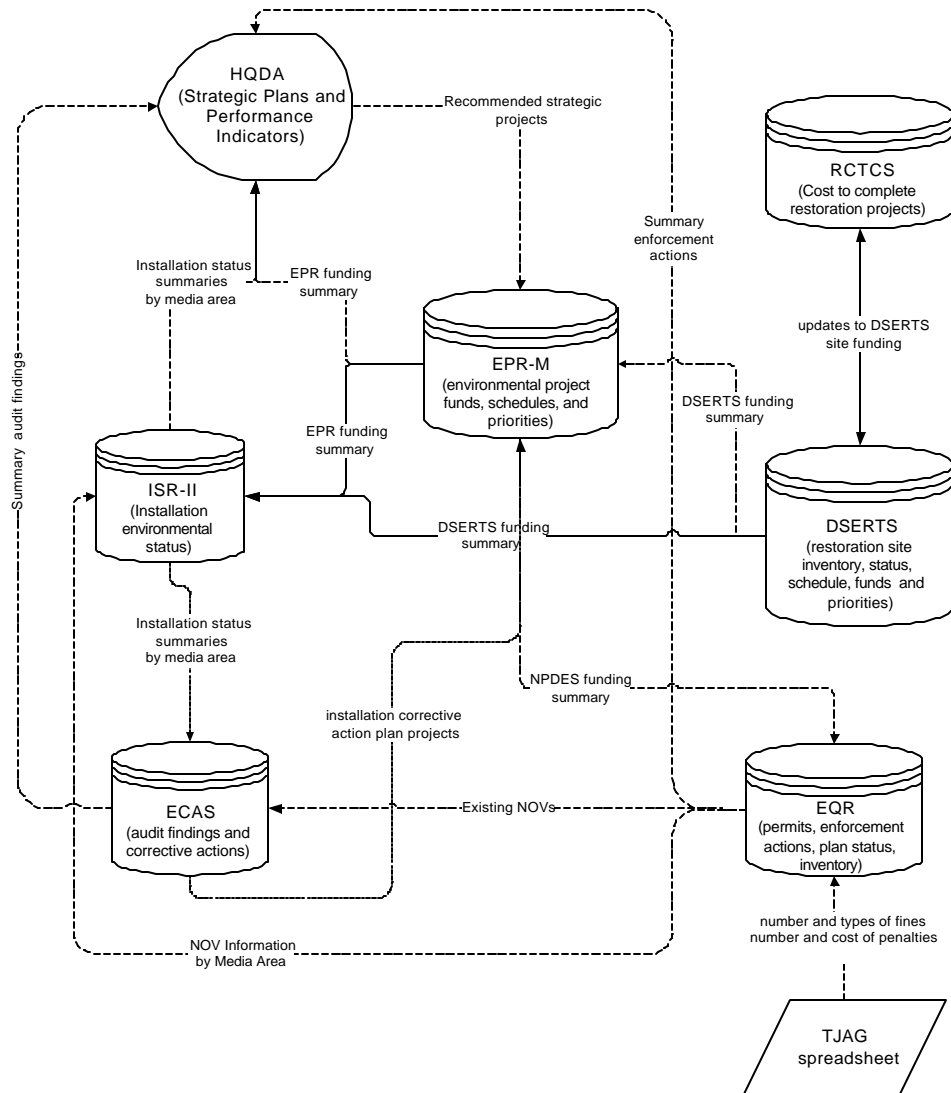


Figure Notes:  
 Solid lines indicate an automated transfer of data among systems. Dashed lines indicate a manual transfer of data among systems.  
 TJAG = The Judge Advocate General spreadsheet of environmental enforcement cases, fines, and penalties.

**14.3 Reporting Frequency:** AEDB will afford real time status review of data entered into existing EPR, EQR, DSERTS, RCTCS, ISR Part II; and ECAS reports. Reporting frequency at the installation level for each of the above reports will remain as previously established.

**14.4 System Data Fields:** The AEDB system includes three completed modules (Installation Profile (IP), Program Environmental Reporting Module (PERM) and Environmental Program Requirements-Review (EPR-R)) currently fielded at the MACOM and Army Headquarters levels. User guides and five additional modules (State of the Media (SOM), Quarterly Army Performance Review (QAPR), Army Environmental Compliance Report (AECR), Fines and Penalties, and Army Range Inventory Database (ARID) are also being developed or undergoing Beta-Testing. AEC is planning the release of the existing three completed modules to the installation level within the next six months. A brief description of each module is provided as follows:

**Installation Profile (IP):** The installation profile is an application designed to provide current information on the environmental status of an installation. IP user can navigate to the installation level by selecting a MACOM, SUBCOM, or REO. The IP feature contains four primary components:

- A geographical user interface
- An “about the installation” section providing background information on an installation in a variety of formats including HTML pages, video, audio, maps, and other available formats.
- A new section including achievements, awards, enforcement actions, notices of violations, and any other current environmental news that is available.
- An environmental status section that presents current status by Pillar in terms of tables, charts, and graphs derived from data sources such as ISR Part II, EQR, EPR, ECAS, and the Defense Environmental Restoration Report to Congress.
- PERM and EPR-R

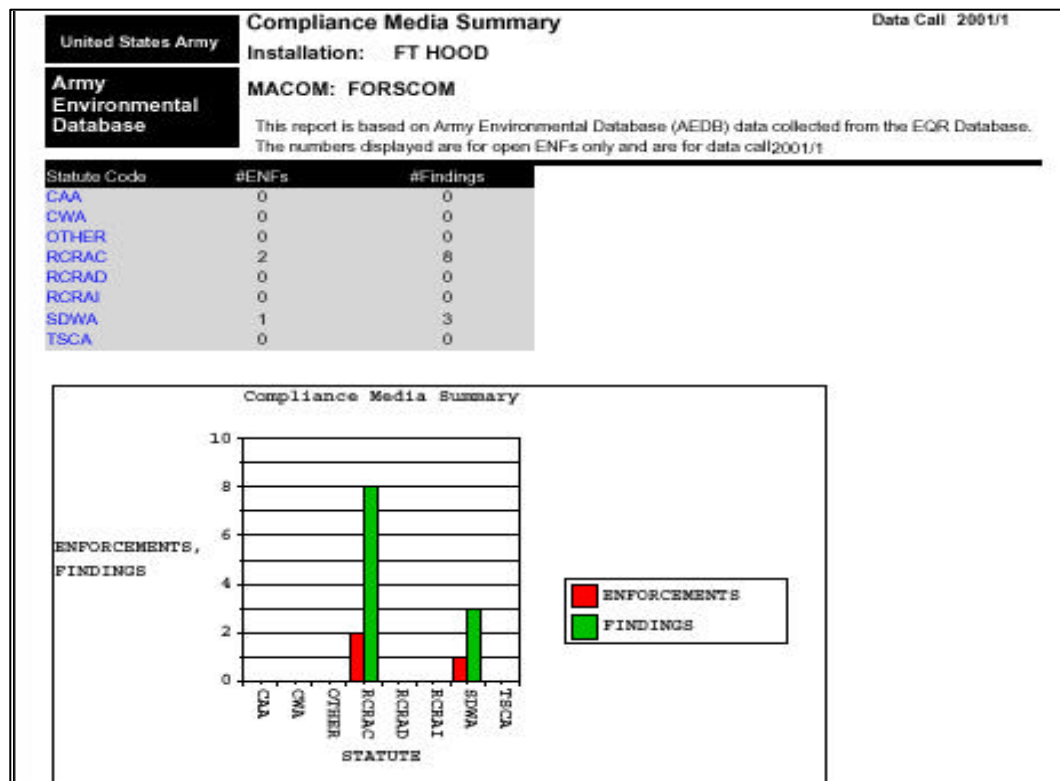
**IP Reports:** IP Reports are generated using various filters (MACOM, SUBCOM, REO and Installation) and are grouped by the following major categories:

**Figure 31 - IP Report Features**

FILTERS				
MACOM	SUBCOM	REO	INSTALLATION	
REPORTS				
Fines/Enforcement Actions (ENFs)	ECAS	Conservation Information	Environmental Requirements	ISR Information
Compliance Media Summary	ECAS Findings w/Narratives	Conservation Plans and Stats	Required and Programmed Project Funding by FY	Installation Level Status
ENFs Detail	ECAS Findings Summary	Pesticide Applicators	EPR Project Lists w /Narratives	C-Rating Standards
ENFs Summary		Pesticide Usage	Funding by Pillar	Installation Comments
		T and E Species List and Stats	Funding by Law/Regulation	C-Rating Summaries by Media
		USFWS Consultations		
		Natural Resources Reports		
		Jeopardy Biological Opinions		

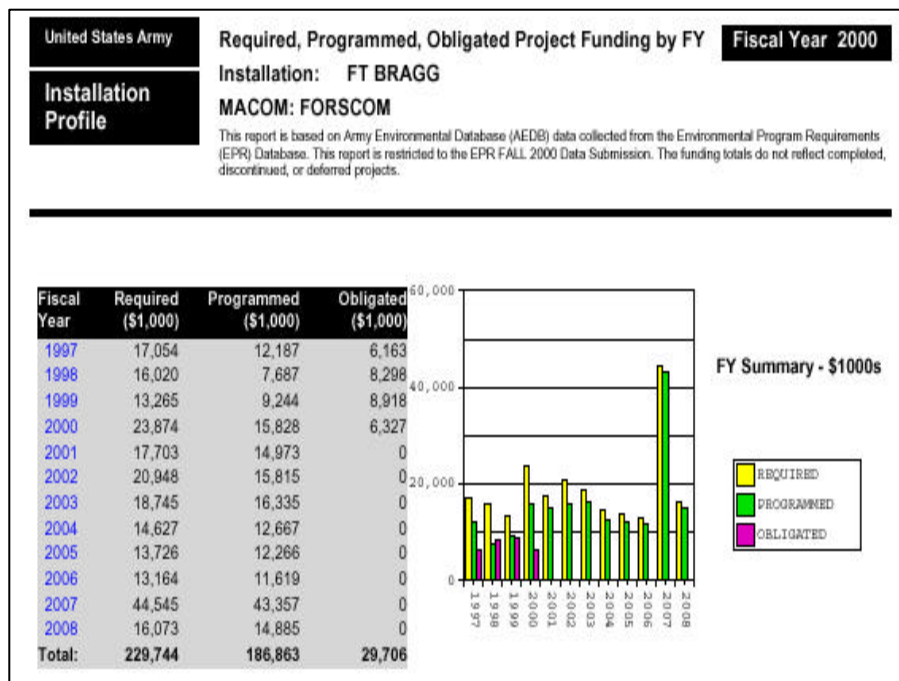
**Figure 32 - Compliance Media Summary Report (Example)**

Blue areas can  
be drilled  
down to  
provide  
expanded level  
of detail →



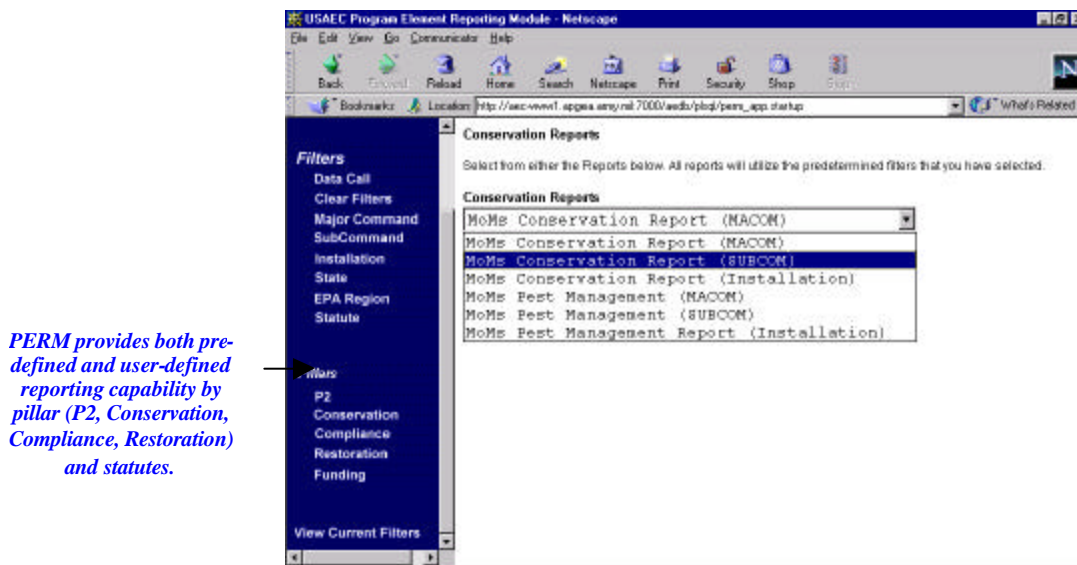
**Figure 33 – Required and Programmed Project Funding by Fiscal Year Report (Example)**

Blue areas can  
be drilled  
down to  
provide  
expanded level  
of detail →



**Program Environmental Reporting Module (PERM):** The PERM provides environmental managers the ability to generate and view (both in hardcopy and in a screen format) program performance metrics such as DoD MOM and funding. PERM provides both pre-defined and user-defined reporting capability by pillar (P2, Conservation, Compliance, Restoration) and statutes.

**Figure 34 – PERM Reporting Module (Example)**

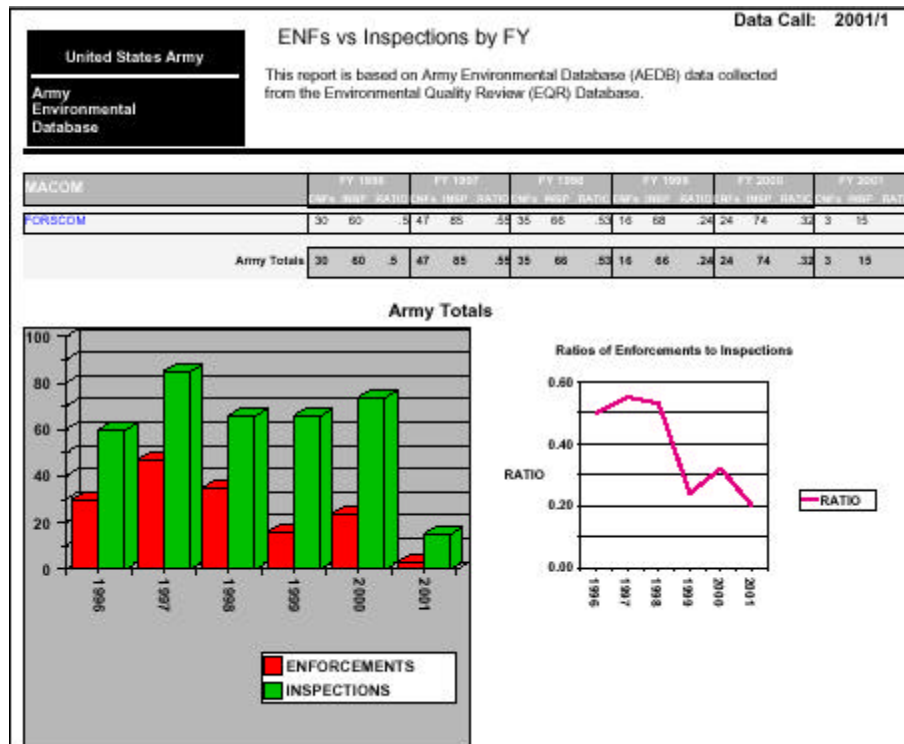


**PERM Tool Reports:** PERM reports are generated using various filters (MACOM, SUBCOM, REO and Installation) and are grouped by the following major categories:

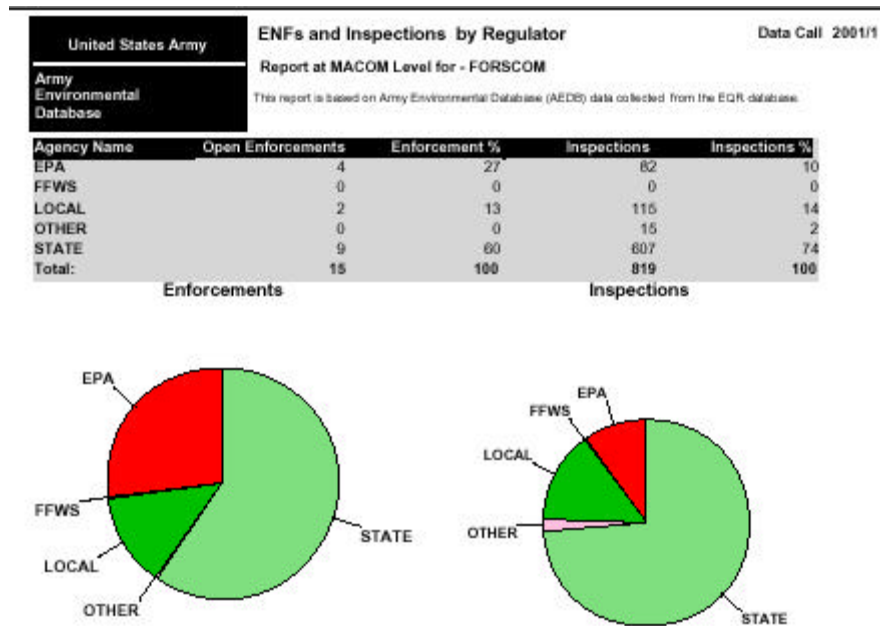
**Figure 35 – PERM Report Features**

<i><b>FILTERS</b></i>			
<i><b>MACOM</b></i>	<i><b>SUBCOM</b></i>	<i><b>REO</b></i>	<i><b>INSTALLATION</b></i>
<b>REPORTS</b>			
ENFs/Inspection	MOM Standards	EPR Submissions	
Enforcements vs. Inspections (By MACOM, SUBCOM, or Installation)	Hazardous Waste (By MACOM, SUBCOM, or Installation)	EPR-M Exhibit 2 Report	
EQR Inspections and ENFs by Statute	Cultural Resources Inventories (By MACOM, SUBCOM, or Installation)		
Inspections and ENFs by Regulator	MoMs Pest Management (By MACOM, SUBCOM, or Installation)		

**Figure 36 – Enforcement Actions Vs Inspection report at the MACOM level (Example)**



**Figure 37 – Enforcement Actions and Inspections by Regulator report at the MACOM level (Example)**



**Environmental Program Requirement – Review (EPR-R):**

EPR-R is a tool for conducting a data quality review on the Environmental Program Requirements. Reviewers can filter their review to specific media, MACOM, SUBCOM, REOs and installation.





meet Congressional obligations. It will contain new and open enforcement actions per reporting quarter.

**Army Environmental Compliance Report (AECR):** The AECR, currently under development, will provide the overall status of the Army's environmental program to Congress. It will contain information on fines (new, open, settled and unresolved enforcement actions) as well as inspections, findings, and permits data.

**Fines and Penalties Report:** The fines and penalties report, currently under development, will provide the general data and format for reporting requirements to the ODEP Compliance Team. Report will be generated on a quarterly basis from AEDB.

**Army Range Inventory Database (ARID):** The purpose of ARID is to provide a repository of Army range information in accordance with the requirements of the proposed Range Rule. The database will contain range information by Army installation and include the range demographics, munitions usage, ownership, and land use restrictions. ARID will also provide a link to DSERTS in order to assist the Army in managing Unexploded Ordinance (UXO) restoration projects on Army ranges. ARID will provide a number of reports to be used for tracking range issues across the Army.

***14.5 System Maintenance:*** USAEC develops and maintain the AEDB system.

***14.6 Contact:*** To obtain a user account contact:  
USAEC Help Desk at 1-800-872-3645.

For additional information contact:  
AEC Special Programs Branch at 410-436-1534 for AEDB  
and PMT functional POC.

AEC Information Management Branch at 410-436-1658 for  
AEDB and PMT Technical POC.

## **PART IV - GLOSSARY OF TERMS**

ACM	Asbestos Containing Material
AEC	Army Environmental Center
AECR	Army Environmental Compliance Report
AEDB	Army Environmental Database
AEPI	Army Environmental Policy Institute
AESAP	Army Environmental Strategic Action Plan
AMS Code	Army Management Structure (AMS) Code
ARC	Annual Report to Congress
ARID	Army Range Inventory Database
ASA(I&E)	Assistant Secretary of the Army for Installations and Environment
AST	Aboveground Storage Tanks
ARSTAF	Army Staff
AUL	Authorized Use List
BCA	Base Closure Account
BCP	BRAC Cleanup Plan
BRAC	Base Realignment and Closure
CA	Congressional Affairs
CERL	Construction Engineering Research Laboratories
CHF	Contaminants Hazard Factor
COR	Contracting Officer's Representative
CSA	Chief of Staff, Army
CTC	Cost To Complete
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DASA/ESOH	Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health
DD	Decision Document
DEP	Director of Environmental Program
DESCIM	Defense Environmental Security Corporate Information Management

DENIX	Defense Environmental Network Information Exchange
DERA	Defense Restoration Account
DERP	Defense Environmental Restoration Program
DLA	Defense Logistics Agency
DoD	Department of Defense
DPG	Defense Planning Guidance
DSERTS	Defense Site Environmental Restoration Tracking System
EA	Environmental Assessment
EASAP	Environmental Strategic Action Plan
ECAS	Environmental Compliance Assessment System
ECAT	Environmental Category (ECAT)
ECP	Engineering Change Proposal
EIS	Environmental Impact Statement,
EL/RAMP	Environmental Legislative and Regulatory Analysis and Monitoring Program
EMS	Environmental Management System
ENSI	Emerging Nontraditional Security Issues
ENF	Enforcement Action
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right to Know Act
EPR	Environmental Program Report
EPR-M	Environmental Program Report - Module
EPR-R	Environmental Program Report - Review
EQR	Environmental Quality Report
ER,A	Environmental Restoration, Army
ESCRS	Environmental Security Corporate Reporting Suite
ESOH	Environment, Safety and Occupational Health
FFID	Federal Facility Identification (FFID) Number
FLORA	Final List of Regulatory Actions
FONSI	Finding of No Significant Impacts

FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability for Transfer
FUDS	Formerly Used Defense Sites
FY	Fiscal Year
HQ	Headquarters
HQISR	Headquarters Installation Status Report
HRS	Hazard Ranking System
HMMP	Hazardous Material Management Program
HSMS	Hazardous Substance Management System (HSMS)
IAG	Inter-Agency Agreement
IAP	Installation Action Plan
IP	Installation Profile
IPMIS	Integrated Pest Management Information System
IPRs	In Progress Reviews
IRP	Installation Restoration Program
ISO	International Organization for Standardization
ISR	Installation Status Report
ITL	Information Technology Laboratory
MACOMs	Major Commands
MoMs	Measures of Merit
MILCON	Military Construction
MSC	Major Subordinate Commands/Districts
MSDS	Material Safety Data Sheet
NDCEE	National Defense Center for Environmental Excellence
NOVs	Notices of Violations
NPL	National Priority List
NPDES	National Pollutant Discharge Elimination System
OCLL	Office of Congressional Legislative Liaison
ODASA/ESOH	Office of the Deputy Assistant Secretary of the Army, Environmental, Safety and Occupational Health
ODEP	Office of the Director of Environmental Programs

OGC	Office of General Counsel
OMB	Office of Management and Budget
OUs	Operable Units
P2	Pollution Prevention
PAI	Pounds of Active Ingredient
PDC	Potential Disposal Cost
PERM	Program Environmental Reporting Module
PFSC	Program Fund Sub Code
POCs	Point of Contacts
PMO	Program Management Office
PMT	Program Manager Toolkit
POMs	Program Objective Memorandums
QAPR	Quarterly Army Performance Review
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RCTCS	Restoration Cost to Complete System
REOs	Regional Environmental Offices
RIP	Remedy In Place
ROD	Record Of Decision
SARA	Superfund Amendments and Reauthorization Act
SARS	Semi-Annual Regulatory Screening Process
SEP	Supplemental Environmental Project
SOM	State Of the Media
SWAR	Solid Waste Annual Reporting system
TAPP	Technical Assistance for Public Participation
TJAG	The Judge Advocate General
TSDF	Treatment, Storage and Disposal Facility
US	United States
USACERL	United States Army Corps of Engineers Construction Engineering Research Laboratories

USTs	Underground Storage Tanks
UXO	Unexploded Ordinance
WES	Waterways Experiment Station
WWW	World Wide Web